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COMMERCIAL CAR JOURNAL

APRIL, 1939

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THE GOLD STRIPE identifies these superior features

ON the outside all flexible tubing looks a good deal alike, but on the inside—where the real story of service is told—Imperial flexible tubing has something that gets across with service men.

That's why the outside covering of Imperial flexible tubing is now marked with a gold stripe—it's an identification of the tubing that has the interlocking brass inner core which is fused to a compound covering with a braided oil-proof covering outside... a tough triple wall and yet thoroughly flexible. It is proof against cold, heat, and vibration, and it cannot swell or kink shut.

But these superior features are not the only reason for using Imperial flexible tubing. Service men like it because it comes in ready-made lines and also because lines of any length can easily be made up right from the coil.

Many service men prefer the convenience and economy of the Imperial assortments of ready-made lines. One such assortment in a steel cabinet costs only \$5.25 and yet it will take care of 68 different flexible gas and oil line replacements on over 30 different models of Chrysler, De Soto, Dodge, Plymouth, Ford, Oldsmobile, Pontiac, Cadillac and LaSalle cars. Another assortment is available consisting of coils of flexible tubing and couplings from which any length of fuel line can be made up.

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You simply cut the desired length of tubing off the coil and then—with a couple of ordinary wrenches—put on the couplings. The diagram below shows the simple method of attaching these couplings.



First pass the flexible tubing through the nut "A" and the compressible sleeve "B". Then place the small grommet "D" into the end of the tube and push the tube into body "C" as far as it will go. Nut "A" is then tightened to body "C". This forms a tight, leak-proof, metal to metal joint.



This folder tells why and how to use Imperial flexible tubing, gives details on tubing and coupling sizes, shows various assortments, and lists "ready-made" lines.

WRITE FOR YOUR COPY

IMPERIAL

Flexible Tubing



**ALWAYS
WITH A
Double
PAY-LOAD**

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1939

Fleet

OPERATORS'

REFERENCE
ANNUAL

EDITOR'S NOTE

Once again we give to fleet operators in particular, and to the truck industry in general, this encyclopedia of practical truck information which we call The Fleet Oper-

ators' Reference Annual. In this issue specifications of all sorts, statistics, legislative requirements and regulations are brought right up to date. The result is a handbook which management and maintenance departments alike of fleet operations will find helpful. Above is a general index. For a cross-index, "Where to Find It," see page 116.

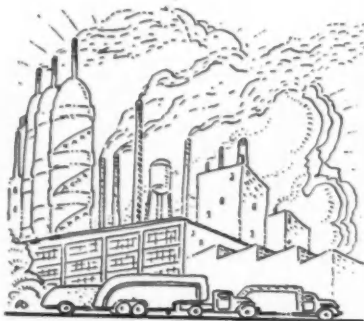
VITAL STATISTICS OF

EDITOR'S NOTE

All production figures include United States and Canada.

All registration figures are United States only.

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Truck Registrations by Years (1904-38)

Year	Registrations	% Gain
1904	410	
1905	800	46
1906	1,100	83
1907	1,700	55
1908	3,100	82
1909	6,050	95
1910	10,000	65
1911	20,000	100
1912	41,400	107
1913	63,800	54
1914	85,600	34
1915	136,000	59
1916	215,000	58
1917	325,000	52
1918	525,000	61
1919	794,372	51
1920	1,006,082	27
1921	1,117,100	11
1922	1,375,725	23
1923	1,612,569	17
1924	2,134,724	32
1925	2,440,854	14
1926	2,764,222	13
1927	2,914,019	5
1928	3,113,999	7
1929	3,379,854	8
1930	3,466,019	3
1931	3,466,571	-6
1932	3,229,315	-7
1933	3,227,357	-0.6
1934	3,409,335	5.5
1935	3,655,705	7.1
1936	3,981,755	9.1
1937	4,237,244	6.2
1938	4,188,815	-1.2

New Registrations

	1938	1937	1936	1935	1934
Ala.	7,041	12,874	13,187	9,925	8,051
Ariz.	2,051	3,659	3,610	3,126	2,167
Ark.	5,909	10,836	9,485	7,383	4,960
Calif.	23,846	36,901	33,656	28,943	20,496
Colo.	4,771	8,411	9,060	6,086	5,196
Conn.	4,422	7,767	8,240	7,318	6,124
D. of C.	1,161	1,882	1,723	1,425	1,115
Fla.	1,753	2,857	2,940	2,492	1,979
Ga.	6,540	10,722	9,412	8,274	6,046
Ill.	6,818	12,986	12,941	10,887	7,921
Idaho	2,613	4,454	41,939	4,004	2,817
Ind.	18,055	30,451	31,123	23,046	17,534
Iowa	9,899	18,269	20,027	16,009	11,123
Kan.	8,940	12,449	12,999	12,754	9,860
Ky.	7,960	12,409	11,406	9,605	7,170
La.	7,244	11,597	10,870	9,089	6,815
Maine	6,155	10,111	9,753	7,201	5,359
Md.	3,315	5,658	5,337	4,104	4,262
Mass.	4,741	7,763	7,382	6,657	5,457
Mich.	9,459	16,235	15,350	14,514	12,887
Minn.	11,268	24,549	24,840	21,104	16,281
Miss.	8,674	13,555	14,144	12,740	92,555
Mo.	5,826	11,176	10,367	6,673	5,414
Mont.	11,716	19,170	20,142	16,200	12,920
Neb.	4,112	5,044	5,930	5,939	4,215
Nev.	4,664	6,202	6,996	6,297	5,411
N.H.	731	1,167	1,210	1,006	636
N.J.	1,759	3,022	3,196	2,490	2,731
N.M.	11,591	18,446	16,935	13,165	11,444
N.Y.	2,911	5,089	4,545	4,058	3,150
N.C.	26,656	41,922	39,159	35,805	30,383
N.D.	9,309	15,691	14,286	13,835	11,185
Ohio	2,463	3,193	2,680	3,144	2,389
Ore.	15,261	26,440	30,028	22,772	20,487
Pa.	8,956	14,702	14,737	11,768	8,944
R.I.	4,064	7,859	8,050	5,964	3,760
S.C.	21,044	39,150	41,919	32,097	29,891
S.D.	1,531	2,749	2,594	2,089	2,035
Tenn.	4,305	7,257	6,091	5,481	4,228
Texas	2,003	2,659	2,962	3,020	2,252
Utah	6,476	10,799	11,062	9,516	6,366
Vt.	25,882	40,905	38,903	32,437	24,854
Wa.	1,984	3,298	3,571	3,498	2,530
W. Va.	1,228	2,444	2,308	2,394	2,048
Wis.	7,906	12,928	12,904	11,402	8,508
Wyo.	5,416	10,222	10,666	9,076	6,199
Total	4,694	9,269	9,181	6,646	5,847
	8,516	16,412	16,237	13,118	9,313
	1,708	2,627	2,661	2,206	1,799

Total... 365,349 618,249 611,644 510,683 403,886

Total Registrations

	1938	1937	1936	1935	1934
Ala.	50,780	53,070	44,272	38,989	34,101
Ariz.	22,998	22,973	20,183	17,964	16,791
Ark.	53,789	59,263	50,131	40,107	35,700
Calif.	*1300,483	*1294,132	*1266,379	253,908	237,556
Colo.	31,447	32,795	*31,930	26,430	27,858
Conn.	63,910	68,070	60,653	62,232	55,678
Dela.	*10,500	*10,314	*10,010	*9,692	*9,394
D. of C.	14,267	18,862	18,397	17,610	17,263
Fla.	70,043	70,308	65,738	57,199	55,359
Ga.	76,154	78,803	73,269	66,079	60,262
Idaho	27,809	28,208	25,852	21,371	17,881
Ill.	*222,582	*220,639	*208,926	*185,477	*174,285
Ind.	122,168	140,292	131,767	132,767	122,791
Iowa	*92,884	*86,636	82,840	80,529	75,350
Kan.	97,744	93,046	*87,113	*80,068	*75,556
Ky.	63,676	59,341	51,840	43,613	37,445
La.	77,009	80,630	76,251	59,398	44,779
Maine	40,000	43,171	39,276	38,079	37,693
Md.	53,926	52,014	53,398	48,528	45,351
Mass.	104,134	104,316	102,400	100,411	98,508
Mich.	*139,631	*146,117	*139,520	*127,283	*123,406
Minn.	115,970	117,632	114,448	105,861	103,882
Miss.	51,000	53,072	43,357	33,306	34,115
Mo.	135,000	*134,457	*128,425	115,819	107,709
Mont.	41,138	*40,081	*39,311	*35,542	*31,087
Neb.	63,500	63,667	62,133	59,054	56,560
Nev.	*7,650	*8,092	*7,680	6,875	6,391
N.H.	*23,597	23,768	*22,023	23,455	22,382
N.J.	131,950	134,458	130,642	124,866	123,351
N.M.	26,915	31,117	22,731	18,245	16,112
N.Y.	326,806	333,543	326,404	306,919	298,379
N.C.	74,211	73,383	65,000	57,931	54,768
N.D.	33,061	32,084	29,650	26,780	26,315
Ohio	170,800	*160,464	*172,723	*170,954	*159,845
Ore.	92,943	96,675	90,638	82,555	73,928
Pa.	59,829	60,660	49,746	42,584	41,411
R.I.	255,654	257,330	249,637	229,026	215,018
S.C.	20,101	19,768	19,458	18,428	18,332
S.D.	41,379	39,835	33,525	29,761	20,677
Tenn.	28,000	26,768	26,172	26,931	23,632
Texas	58,744	58,736	48,388	42,031	37,755
Utah	316,757	294,639	285,839	257,055	226,276
Vt.	22,432	21,094	22,000	17,587	17,103
Wa.	9,042	9,029	8,682	9,031	8,612
W. Va.	66,410	67,547	57,689	60,376	57,268
Wis.	83,204	84,577	79,500	68,657	64,321
Wyo.	43,785	44,558	36,908	29,305	27,253
Total	135,413	145,822	150,779	130,144	120,190
	17,589	17,368	15,592	14,593	13,102

Total... 4,188,815 4,237,244 3,981,755 3,655,705 3,400,335

† Data from R. L. Polk & Co.

* Includes buses.

‡ Includes approximately 120,000 light commercial vehicles listed as passenger cars for 1936 and 130,000 for 1937 and 1938.

AGE OF TRUCKS IN USE (A New Analysis)*

Year	New Truck Registrations	Per Cent Surviving	Number Surviving	Age of Survivors	Of Trucks in Use:
1938	365,349	100.0	365,349	1½	365,349 are less than 1 year of age
1937	618,249	99.0	612,066	1½	977,415 are up to 1½ years of age
1936	611,644	97.1	593,906	2½	1,571,321 " " " 2½ " "
1935	510,683	94.8	484,127	3½	2,055,448 " " " 3½ " "
1934	403,886	91.8	370,767	4½	2,426,215 " " " 4½ " "
1933	245,869	88.0	216,365	5½	2,642,589 " " " 5½ " "
1932	180,413	83.4	150,464	6½	2,793,044 " " " 6½ " "
1931	313,884	77.0	241,690	7½	3,034,734 " " " 7½ " "
1930	410,689	66.0	271,061	8½	3,305,795 " " " 8½ " "
1929	527,057	52.2	275,124	9½	3,580,919 " " " 9½ " "
1928	341,123	37.8	128,944	10½	3,709,863 " " " 10½ " "
1927	327,965	25.0	81,991	11½	3,791,854 " " " 11½ " "
1926	385,997	16.3	62,917	12½	3,854,771 " " " 12½ " "
1925	418,000	10.6	44,308	13½	3,899,079 " " " 13½ " "
1924	1340,000	6.8	23,120	14½	3,922,199 " " " 14½ " "
1923	1401,846	4.4	17,672	15½	3,939,871 " " " 15½ " "
1922	1265,697	2.8	7,440	16½	3,947,311 " " " 16½ " "
1921	1156,464	1.8	2,816	17½	3,950,127 " " " 17½ " "
1920	1292,653	1.2	3,512	18½	3,953,639 " " " 18½ " "
1919	1260,358	0.8	2,083	19½	3,955,722 " " " 19½ " "

* These figures are purely a statistical approximation calculated from a life curve applicable to passenger cars. The figures differ from those previously published because of a new study of passenger car registrations which showed a longer car life than previously had been computed. Frankly, COMMERCIAL CAR JOURNAL has no authentic data as to the life expectancy of trucks. However, if trucks last longer than passenger cars, then the conclusions are conservative. If they do not last as long, then the conclusions are generous.

† Production less exports.

THE TRUCK INDUSTRY

By Makes—New Truck Registrations—Units

Year	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Autocar	1,617	2,181	1,451	1,001	1,139	1,127	1,015	1,748	2,009	2,941	2,261
Brookway	1,303	1,593	1,695	1,245	1,213	875	752	1,685*	3,780*	4,533*	3,645*
Chevrolet	119,479	183,674	204,344	167,129	157,507	99,880	60,784	99,800	118,253	160,892	133,795
Diamond T	4,393	8,118	8,750	6,454	5,440	4,139	2,250	2,483	2,888	3,590	2,308
Dodge	33,656	64,098	85,295	61,488	48,252	28,034	8,744	13,518	15,558	28,567	36,570
Federal	1,370	2,339	2,930	2,190	1,962	1,360	1,167	1,523	2,095	2,853	3,118
Ford	100,959	189,376	177,244	185,848	128,250	62,397	66,937	138,854	197,216	223,405	65,260
G. M. C.	20,152	43,522	26,980	11,442	10,449	6,602	8,359	6,919	9,004	14,248	17,506
Indiana	435	1,371	1,705	862	729	1,252	957				
International	55,836	76,174	71,958	53,471	31,555	26,658	15,752	21,073	23,703	31,434	26,159
Mack	4,406	5,513	4,226	1,515	1,830	1,852	1,425	2,945	4,943	6,823	6,890
Reo	2,929	4,254	4,227	5,101	5,035	3,042	3,187	5,166	6,427	12,894	16,325
Sterling	267	311	277	174	134	108	227	739	1,224	1,577	1,041
Stewart	390	1,148	1,280	880	736	684	867	1,394	23,15	2,163	1,964
Studebaker	2,000	5,129	3,279	2,100	1,697	2,407†	2,430	3,495	1,518	1,661	997
White	3,514	5,933	5,757	3,304	3,963	1,384	2,138	2,561	4,395	6,121	6,260
Willys	1,889	1,122	2,441	2,280	25	233	1,132	3,131	4,264	6,536	2,740
All Others	10,754	22,393	7,805	4,199	3,970	4,035	4,290	7,050	11,107	16,819	14,824
Total	365,349	618,249	611,644	510,683	403,886	245,869	180,413	313,884	410,699	527,057	341,123

* Includes Indiana. † Includes Rockne

By Makes—New Truck Registrations—Per Cent of Total

Year	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Autocar	.44	.35	.24	.20	.28	.46	.56	.56	.49	.56	.66
Brookway	.36	.26	.28	.24	.30	.36	.42	.54	.92	.86	1.07
Chevrolet	32.70	29.71	33.41	32.73	38.99	40.62	33.69	31.74	28.79	30.53	39.22
Diamond T	1.20	1.31	1.43	1.26	1.35	1.68	1.25	.79	.70	.68	.68
Dodge	9.21	10.37	13.95	12.04	11.94	11.40	4.85	4.31	3.79	5.42	10.72
Federal	.37	.38	.48	.43	.49	.55	.65	.48	.51	.54	.91
Ford	27.63	30.63	28.98	36.39	31.76	25.38	37.10	44.25	48.02	42.39	19.13
G. M. C.	5.52	7.04	4.41	2.24	2.59	2.69	3.52	2.20	2.19	2.70	5.13
Indiana	.12	.22	.28	.17	.18	.51	.53				
International	15.28	12.32	11.76	10.47	7.81	10.84	8.73	6.72	5.77	5.96	7.67
Mack	1.20	.89	.69	.40	.45	.67	.79	.94	1.21	1.29	2.02
Reo	.80	.69	.69	1.00	1.25	1.24	1.77	1.65	1.56	2.45	4.79
Sterling	.07	.05	.04	.03	.03	.04	.13	.23	.30	.30	.30
Stewart	.11	.19	.21	.17	.18	.28	.48	.44	.56	.41	.58
Studebaker	.55	.83	.54	.41	.42	.98	1.35	1.11	.37	.32	.29
White	.96	.96	.94	.65	.96	.56	1.19	.82	1.07	1.16	1.84
Willys	.52	.18	.40	.45	.01	.09	.63	1.00	1.04	1.24	.66
All Others	2.95	3.62	1.27	.82	.98	1.65	2.36	2.22	2.71	3.19	4.33
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Truck Production by Capacities—Units and Per Cent

	1938*	1937	1936	1935	1934	1938*	1937	1936	1935	1934
1/2-ton or less	208,071	395,157	316,208	249,957	172,089	39.2	41.7	38.6	34.1	28.6
1-ton and less than 1 1/2	15,795	21,580	9,686	2,259	2,341	3.0	2.3	1.1	.3	.4
1 1/2-ton and less than 2	252,393	441,156	423,503	420,597	376,475	47.7	46.6	52.0	57.5	62.9
2-ton and less than 2 1/2	16,792	30,431	30,637	28,950	25,995	3.2	3.2	3.7	4.0	4.3
2 1/2-ton and less than 3 1/2	9,486	18,971	12,309	10,465	11,136	1.8	2.0	1.5	1.4	1.9
3 1/2-ton and less than 5	4,757	6,170	4,621	3,612	4,752	.9	.6	.5	.5	.8
5-ton and over	22,417	34,037	21,413	16,165	6,609	4.2	3.6	2.6	2.2	1.1
Total	529,711	947,502	818,377	732,005	599,397	100.0	100.0	100.0	100.0	100.0

* Partly estimated.

Total Truck Registrations by Capacities *

	UNITS				PER CENT OF TOTAL			
	1938	1937	1936	1935	1938	1937	1936	1935
1/2-ton or less	1,462,567	1,395,748	1,126,965	933,205	34.91	32.94	28.33	25.50
1-ton & less than 1 1/2	53,030	65,677	112,647	361,549	1.27	1.55	2.83	9.89
1 1/2-ton & less than 2	2,312,938	2,426,365	2,401,407	2,046,098	55.22	57.31	60.33	55.97
2-ton & less than 2 1/2	147,991	141,100	140,112	130,874	3.53	3.33	3.52	3.58
2 1/2-ton & less than 3 1/2	78,666	90,677	99,909	103,822	1.88	2.14	2.51	2.84
3 1/2-ton & less than 5	30,536	32,203	32,640	31,439	.73	.76	.82	.86
5-ton & over	103,087	83,474	66,075	49,718	2.45	1.97	1.66	1.36
Total	4,188,815	4,237,244	3,981,755	3,655,705	100.00	100.00	100.00	100.00

* Estimated on basis of eight (8) year average production by capacities. This average percentage was then applied to total truck registrations as of the end of each year.

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Truck Production by Months

Year	1934	1935	1936	1937	1938
Jan.	44,870	64,529	67,771	74,995	58,282
Feb.	44,952	63,204	65,205	72,939	51,484
Mar.	61,068	70,520	80,891	96,016	52,256
April	67,532	69,338	90,346	100,324	48,018
May	60,348	59,324	78,675	96,965	41,575
June	48,292	65,785	80,335	91,820	41,857
July	44,546	61,582	70,880	83,996	38,336
Aug.	53,890	58,942	63,146	87,802	36,259
Sept.	46,335	33,229	46,707	55,033	20,174
Oct.	49,643	60,203	34,709	31,939	22,380
Nov.	35,107	60,720	54,160	67,509	54,638
Dec.	42,814	64,629	76,571	88,165	65,492
Total	599,397	732,005	809,486	947,502	529,711

New Registrations by Months*

Year	1934	1935	1936	1937	1938
Jan.	22,903	34,759	43,760	47,618	31,995
Feb.	24,476	34,797	40,301	41,843	27,551
Mar.	33,864	41,511	52,430	60,301	37,255
April	38,882	46,785	64,957	67,832	35,682
May	39,831	47,968	62,183	65,857	32,937
June	34,768	48,243	56,851	58,626	30,847
July	37,490	51,243	63,295	61,686	33,478
Aug.	40,790	50,355	59,222	60,872	34,231
Sept.	37,225	41,390	54,611	54,711	26,570
Oct.	40,678	37,439	41,207	40,246	19,589
Nov.	28,689	36,935	30,222	27,248	23,943
Dec.	24,070	39,258	42,205	31,409	31,474
Total	403,886	510,683	611,644	618,249	365,349

* Data from R. L. Polk & Co.

Truck Production & Wholesale Value

(U. S. & Canada)

	Number†	% Increase	Value‡
1904	411		\$946,947
1905	450	9.4	970,000
1906	500	11.0	1,050,000
1907	700	40.0	1,360,000
1908	1,500	114.0	2,550,000
1909	3,255	117.0	5,230,023
1910	6,000	84.5	9,660,000
1911	10,681	78.0	21,000,000
1912	22,000	106.0	43,000,000
1913	23,500	6.8	44,000,000
1914	25,375	29.0	45,088,464
1915	74,000	192.0	125,800,000
1916	92,130	24.5	161,000,000
1917	128,157	39.2	220,982,688
1918	227,250	77.2	434,168,992
1919	275,943	21.5	423,326,621
1920	321,789	16.5	423,249,410
1921	164,304	-48.9	169,914,098
1922	277,140	69.0	231,282,063
1923	426,505	54.0	317,478,940
1924	434,140	1.8	326,706,496
1925	557,066	28.6	470,634,763
1926	556,818		468,752,789
1927	487,020	-10.6	435,072,641
1928	588,983	18.5	459,045,380
1929	826,817	40.4	595,504,039
1930	599,991	-27.4	405,949,916
1931	434,176	-27.6	272,748,306
1932	245,282	-43.5	142,264,003
1933	358,548	46.2	192,131,509
1934	599,397	67.2	332,913,985
1935	732,005	22.2	399,211,522
1936	818,377	11.8	481,961,420
1937	947,502	15.8	573,310,107
1938	529,711	-44.1	335,815,586

Foreign assemblies of parts made in U. S. but assembled abroad are included in this table.

† Figures for 1921 to date are "factory sales" for U. S. plants and "production" for Canadian plants.

‡ Substantial part of the trucks reported comprises chassis only, without body; hence the value of bodies for these chassis is not included.

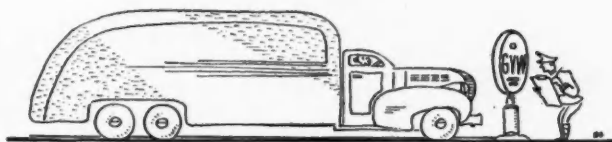
- Denotes decrease.



STATE SIZE

STATE	SIZE RESTRICTIONS							GROSS WEIGHT		(See NOTE) PRACTICAL GROSS WEIGHT LIMITS (In thousands of pounds)													
	Width (In Inches)	Height (In Feet)	LENGTH			Number of Trailers 1/2-Semi-Trailer	Minimum Tandem Axle Spacing	(LEGAL LIMITS)		(Where No Distinction is Made Between Pneumatic and Solid Tire Limits, Below Limits Apply to Both)													
			Single Unit	Tractor Semi-Trailer	Other Combinations			Per Inch of Tire Width	Per Axle (1000 lb.)	T 4-Wheel Single Unit	T 6-Wheel Single Unit	4-Wheel Tractor 2-Wheel Semi-T.	4-Wheel Tractor 4-Wheel Semi-T.	6-Wheel Tractor 4-Wheel Semi-T.	4-Wheel Truck 4-Wheel Trailer	4-Wheel Truck 6-Wheel Trailer	6-Wheel Truck 4-Wheel Trailer	6-Wheel Truck 6-Wheel Trailer	4-Wheel Tractor 2-Wheel Semi-T. 4-Wheel Trailer	4-Wheel Tractor 4-Wheel Semi-T. 4-Wheel Trailer	6-Wheel Tractor 4-Wheel Semi-T. 4-Wheel Trailer		
Ala.	96	12	30	40	NP	1/2	NS	NR	NR	20	20	20	20	20	NP	NP	NP	NP	NP	NP	NP	NP	NP
Ariz.	96	14 1/2	33	85	85	1 1/2	NS	500-S 700-P	18	22	34	40	44	56	44	56	56	68	62	86	90		
Ark. Z XV	98	12 1/2	35	45	45	1 or 1/2	NS	Table	Table	24.9	41.2	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	NP	NP	NP	NP
Cal. ZX	98	13 1/2	33	60	60	NR	40	NS-P 800-S	17	26	34	43	52	60	62	60	60	68	68	68	68		
Colo. X	98	12 1/2	35	40	50	1 1/2	40	NS-P 500-S	18-I 16-J	24	34	50.4	50.4	50.4	48	58	58	63	63	63	63		
Conn. Z	98 e 102	12 1/2 aa	40	40	NP	1/2	Z	NS-P 800-S	NS	32-P 26-S	40-P 26-S	40-P 26-S	40-P 26-S	40-P 26-S	NP	NP	NP	NP	NP	NP	NP	NP	NP
Del.	98	12 1/4	33	60	60	1 1/2	NS	700	18-P 16-S	28-P 22-S	36-PN 22-S	40-P 38-S	40-P 38-S	40-P 38-S	48-P 44-S	48-P 44-S	58-PN 44-S	58-PN 44-S	62-P 60-S	62-P 60-S	62-P 60-S		
D. C. Z	98	12 1/2	33	33	85	NR	40	880-P 800-S	24.6 P 18.4 a	27.7-S 30.8-P	39.8-P	39.8-P	39.8-P	39.8-P	61.8-P	70.4-P	70.4-P	79.2-P	70.4-P	70.4-P	79.2-P		
Fla. Z	84	12	35	35	45	1 1/2	NS	550	NR	16-PQ 8-S	16-PQ 8-S	19-PQ 9.5-S	32-PQ 11-S	32-PQ 11-S	32-PQ 11-S	32-PQ 11-S	32-PQ 11-S	32-PQ 11-S	32-PQ 12.5-S	32-PQ 14-S	32-PQ 14-S		
Ga.	96	12 1/2	30 e 35 f	85 e 45 f	85 e 45 f	1 1/2	NS	800	17.6	22 12.5-PL	39.8 12.5-PL	39.8 12.5-PL	39.8 12.5-PL	39.8 12.5-PL	44 25-PL	44 25-PL	44 25-PL	44 25-PL	61.8 25-PL	61.8 25-PL	61.8 25-PL		
Idaho VW	96	14	35	35	65	1 or 1/2	NS	800 o	18	28	42	42	56	60	56	56	56	56	NP	NP	NP		
Illinois	96	NS	35	35	40	1 1/2	40	800	16	24 E	40	40	40	40	56	56	72	72	72	72	72		
Indiana X	96	12	33	40	40	1 1/2	40	800-P 640-S	16-P 12.8-S	32-W	39-W	40	40	40	40	40	40	40	40	40	40		
Iowa X	96	12	30 33 g	45	45	NR	40	NS	18-P 14-S	32-PW 28-S	33.3-P 33.9-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S	40.7-P 40.7-S		
Kansas X	96	12 1/2	35	35	45	1 or 1/2	40	NS	18-P I 16-S	24 28 t	34	46.9	46.9	46.9	48	58	58	63	NP	NP	NP		
Ky.	96	11 1/2	28 1/2	30	NP	1/2	NS	800	NR	18	18	18	18	18	NP	NP	NP	NP	NP	NP	NP		
La.	96	12 1/2	33	45	45	1 or 1/2	40	800	18-P I 16-S	8-PL	14-PL	14-PL	14-PL	14-PL	14-PL	14-PL	14-PL	14-PL	NP	NP	NP		
Maine	96	12 1/2	40 h	40 h	40 h	1 or 1/2	NS	600	18-P 13.5-S	24-PQ 20-S	40	40	40	40	40	40	40	40	NP	NP	NP		
Md. Z	96	NR	NR	NR	NR	1 n	NS	700	18	28-P 42-S	35-P 42-S	42	42	42	52	62	62	72	88	88	78		
Mass.	96 102 b	NR	33 j 28	40	NS	1 or 1/2	NS	800	NR	30-P 28-S	40	40	40	40	31-P 29-S	31-P 29-S	41	41	NP	NP	NP		
Mich. P	96 102 b	12 1/2	35	50	50	1 1/2	NS	700	18-P 16-S	38-PW 32-S	44-PW 39.2-S	54-PW 46-S	62-PW 55.2-S	70-PW 62.4-S	72-PW 64-S	80-PW 71.2-S	80-PW 71.2-S	88-PW 78.4-S	90-PW 80-S	98-PW 87.2-S	114-PW 101.6-S		
Minn. Z	96	12 1/2	40	40	40	1 1/2	NS	NR	18-P u 10.8-S	38-PW 21.6-S	42-PW 25.2-S	54-PW 32.4-S	60-PW 38-S	66-PW 39.6-S	42-PW 25.2-S	48-PW 25.2-S	48-PW 25.2-S	48-PW 25.2-S	NP	NP	NP		
Miss.	96	12 1/2	40	40	55	NR	40	700	18-P 16-S	22	30	30	30	30	30	30	30	30	30	30	30		
Mo. Z	108 96	12 1/2	33	40	40	1 or 1/2	NS	600	16	24	24	38	38	38	48	48	48	48	NP	NP	NP		
Mont. Z	98 96	14 1/2	33	60	60	1 1/2	NS	800	16.8 v	24	34	40.8	40.8	40.8	48	58	58	68	64.8	64.8	84.8		
Neb.	96	12	35	35	45	1 1/2	NS	NS	16	32-W	32	32	32	32	48	48	48	48	48	48	48		
Nev. Z	96	13 1/2	60	60	60	NR	42	800	NR	25	38	38	38	38	60	63	63	78	63	63	76		
N. H.	96	NR	33	45	45	NR	NS	800	16	26	38	38	38	38	38	38	38	38	38	38	38		
N. J. Z	96	12 1/2	35 U 28	45 36U	50 36U	1 or 1/2	NS	Table	Table	30	40 U 30	60	60	60	60	60	60	60	NP	NP	NP		
N. M. V-X	96 100 b	12 1/2	35	45	45	1 or 1/2	40	700-P S-NS	18-I 18-J	38-IW 32-J	40.2-I 40.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	NP	NP	NP		
N. Y. X	96 106 b	13	35	50	50	1 or 1/2	48	640-S 800-P	22.4-P 17.9-S	38-P 28.8-S	44-P 35.2-S	51.5-P 49.2-S	51.5-P 49.2-S	51.5-P 49.2-S	51.5-P 49.2-S	51.5-P 49.2-S	51.5-P 49.2-S	51.5-P 49.2-S	NP	NP	NP		
N. C.	96	12 1/2	35	45	45	1 or 1/2	NS	600	18-I 16-J	20 L	40 L	40 L	40 L	40 L	40 L	40 L	40 L	40 L	NP	NP	NP		
N. D. Z	96	12 1/2	40	40	40	1 or 1/2	NS	800	16	35 W	35	35	35	35	35	35	35	35	NP	NP	NP		
Ohio	96	12 1/2	35	40	60	NR	NS	650 o	18-P 16-S	24-P 20-S	24-P 20-S	42-P 36-S	42-P 36-S	42-P 36-S	48-P 40-S	48-P 40-S	48-P 40-S	48-P 40-S	66-P 56-S	66-P 56-S	66-P 56-S		
Okl.	96	12 1/2	45	45	45	1 1/2	NS	600	NS	24	24	31	31	31	48	48	48	48	55	55	55		

WEIGHT LIMITS



STATE	SIZE RESTRICTIONS							GROSS WEIGHT		(See NOTE)	PRACTICAL GROSS WEIGHT LIMITS														(In thousands of pounds)
	Width (In Inches)	Height (In Feet)	LENGTH			Minimum Tandem Axle Spacing	(LEGAL LIMITS)		(Where No Distinction is Made Between Pneumatic and Solid Tire Limits, Below Limits Apply to Both)																
			Single Unit	Tractor Semi-Trailer	Other Combinations		Per Inch of Tire Width	Per Axle (1000 lb.)	T	T															
									4-Wheel Single Unit	6-Wheel Single Unit	4-Wheel Tractor 2-Wheel Semi-T.	4-Wheel Tractor 4-Wheel Semi-T.	6-Wheel Tractor 4-Wheel Semi-T.	4-Wheel Truck Trailer	4-Wheel Truck Trailer	6-Wheel Truck Trailer	6-Wheel Truck Trailer	4-Wheel Tractor 2-Wheel Semi-T. 4-Wheel Trailer	4-Wheel Tractor 4-Wheel Semi-T. 4-Wheel Trailer	6-Wheel Tractor 4-Wheel Semi-T. 6-Wheel Trailer					
ZXV Ore.	96	11	35	35	50	NR	40	S-NS q 600-P	17 w 16 x	34 w 32 xW	46.9 w 46.9 x	46.9 w 46.9 x	46.9 w 46.9 x	46.9 w 46.9 x	54	54	54	54	54	54	54	54	54	54	
Pa.	96	14½	33	45	70	1 or ½	36	800	18 y	26 H	36 H	39	39	39	52	62	62	62	NP	NP	NP	NP	NP	NP	
R. I.	102	12½	NR	85	85	2	NS	800	22.4	32-P 28-S	40	40	40	40	64-P 56-S	72-P 68-S	72-P 68-S	72-P 68-S	80	72-P 68-S	72-P 68-S	80	80	80	
S. C.	96	12½	35	45	45	1 or ½	40	NR	18-P 16-S	25	25	40	40	40	40	40	40	40	NP	NP	NP	NP	NP	NP	
S. D.	96	13	30	40	40	1 or ½	NS	NR	NR	20	24	30	30	30	30	30	30	30	NP	NP	NP	NP	NP	NP	
Tenn.	96	12	27	35	35	1 or ½	NS	NS	18	18	18	18	18	18	18	18	18	18	NP	NP	NP	NP	NP	NP	
Tex.	96	12½	35	45 m	45 m	1 or ½	NS	800	NR	7-PL F	7-PL F	7-PL F	7-PL F	7-PL F	7-PL F	7-PL F	7-PL F	7-PL F	NP	NP	NP	NP	NP	NP	
Utah	96	14½	45	60	60	1 or ½	NS	800	18-P 13.8-S	38-P 27-SW	53.9-P 40.4-S	54-P 40.5-S	54-P 40.5-S	54-P 40.5-S	54-P 40.5-S	54-P 40.5-S	54-P 40.5-S	54-P 40.5-S	NP	NP	NP	NP	NP	NP	
Vt.	96	12	50	50	50	1 or ½	40	800	15	25 M 16	30 M 16	35 M 16	35 M 16	35 M 16	35 M 16	35 M 16	35 M 16	35 M 16	NP	NP	NP	NP	NP	NP	
Va.	96	12½	33	45	45	1 or ½	40	850	16	24	35	35	35	35	35	35	35	35	NP	NP	NP	NP	NP	NP	
Wash.	96	12½	35	60 bb	60 bb	1 or ½	42	500	18 A	24	34	42	50	60	48	58	58	58	NP	NP	NP	NP	NP	NP	
W. Va.	96	12½	35	45	45	NR	40	NS	18-PB 14-S	36-PW 28-S	54-PW 42-S	54-PW 42-S	72-PW 57.6-S	90-PW 72-S	72-PW 57.6-S	90-PW 72-S	90-PW 72-S	102.4-P 81.9-S	90-PW 72-S	102.4-P 81.9-S	102.4-P 81.9-S	102.4-P 81.9-S	102.4-P 81.9-S		
Wis.	96 d	12½	33	45	45	1 or ½	40	S-NS 800-P	19-C 12-D	24-C 15-Dk	36-C 22.5-D	43-C 27-D	48-C 30-D	60-C 37.5-D	48-C 30-D	60-C 37.5-D	60-C 37.5-D	72-C 45-D	NP	NP	NP	NP	NP	NP	
Wyo.	96	12½	40	45	45	NR	NS	800	18	36 W	43.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	

- a-May exceed, when solids changed to pneumatics.
b-At rear tires, when solids changed to pneumatics.
c-Regulated "for hire" vehicles.
d-104 inches for urban buses.
e-Permissible length of private vehicles.
f-Permissible length of "for hire" vehicles.
g-Buses under Railroad Commission jurisdiction.
h-Trailers are limited to 26 feet.
i-Exclusive of bumpers.
j-Single units with over 2 axles.
k-Special limitations, vehicles with 2 driving axles.
m-When transporting property to or from receiving or loading point of a common carrier—55 feet.
n-NR—when operated under 10 miles per hour.
o-Graduated according to tire width.
p-13,000 lbs. on tandem axles 3 ft. 6 in. apart; applies June 1 to February 28; differs with season.
q-500 lbs. when total tires under 30 inches wide.
r-Permissible weight on tandem axles.
s-Permissible on axles spaced under 12 feet.
t-Dual tires over 8 inches wide.
u-12,000 lbs. when axles spaced under 8 feet apart.
v-13,900 lbs. on 6-wheeled vehicles.
w-Permissible weight on paved highways.
x-Permissible weight on unpaved highways.
y-16,500 lbs. on rear, 8,000 lbs. on front axle of 6-wheeled vehicle.
z-9,000 lbs. when axles spaced 8 feet apart.
aa-Commercial vehicles.
ab-Vehicles operating prior to April 1, 1937 permitted 85 feet until January 1, 1939.

Table—See NHUC Size and Weight Book.

- NP—Not permitted.
NR—No restriction.
NS—Not specified.
A—On 2-axle truck or semi-trailer; 14,000 lbs. on trucks or 12,000 lbs. on trailers with over 2-axes.
B—In "Industrial Areas"—varies for different "areas."
C—Permissible on "Class A" highways.
D—Permissible on "Class B" highways.
E—2 axle trailer or semi-trailer allowed 32,000 lbs.
F—Double above when transporting property to or from receiving or loading point of a common carrier.
G—27,000 lbs. with dual tires—lower for solids.
H—Maximum shown—gross depends on chassis weight.
I—Permissible on balloon tires.
J—Permissible on other than balloon tires.
K—May exceed on designated highways with permit.

NOTE

Except when shown in shaded squares or when followed by the letter "W", the above gross weight limits are the limits fixed by state law.

When shown in shaded squares the above limits are computations made by the National Highway Users Conference to show what it considers to be practical gross weights where gross weights are arrived at by application of one of the formulae shown below under Footnote "X". In making these computations, wheel base was arrived at by deducting 8 ft. total over-hang front and rear from permissible overall length of unit or combination; tandem axles were considered to be a minimum permissible distance apart; H-20 bridge formula was used in West Virginia. When actual over-hang is less than 8 ft. additional gross weight will be possible.

When followed by the letter "W", the limits shown are maximum possible weights where gross weight is determined by permissible axle weight. These limits are possible only when each axle carries a gross weight equal to the permissible axle limit as shown. Actual gross weight in any case will be reduced by whatever amount any axle fails to reach the maximum axle weight, as shown above.

- L—Under Corporation Commission—buses, 18,000 lbs. and trucks or trailers 18,000 lbs. gross.
M—On state highways.
N—38,000 lbs. with pneumatic tires, 3 axles, 2 hubs and brakes on each hub.
Q—Different limits for "for hire" vehicles.
T—With the following exceptions full trailers are permitted the same gross weight as other single units:—
Ala., Conn., Ky.—Full trailers prohibited.
Del.—Trailers limited to 22,000 lbs. gross.
Ill.—All trailers limited to 32,000 lbs. gross.
Mass.—Trailers limited to 1,000 lbs. capacity.
Minn.—Trailers limited to 6,000 lbs. gross.
Nebr.—All trailers limited to 18,000 lbs. gross.
Weight of trailers is limited by axle limitations and formula, in states determining gross weight by formula.
U—6-wheelers manufactured after January 1, 1935.
V—Till January 1, 1941 for combinations manufactured prior to January 1, 1938.
W—Solid tires prohibited.
V—Solid tires prohibited except on property carrying vehicles operating at 10 miles per hour or less.
V—Solid tires permitted only in cities and towns.
W—Maximum gross when all axles carry maximum load—See "Note."
X—States where gross weight is determined by formula:—

- Ark.—650-700 (L plus 40) 2 or more consecutive axles and any unit or combination.
Cal.—1750 (L plus 8) only applies to combination.
Colo.—700 (L plus 40) semi-trailers.
Ind.—600 (L plus 40) 2 or more consecutive axles and any unit or combination.
Iowa.—450 (L plus 53-1/2) any unit or combination.
Kans.—700 (L plus 40) only applies to combinations.
N. M.—600 (L plus 40) 2 or more consecutive axles and any unit or combination.
N. Y.—750 (L plus 40) 3 or more consecutive axles and any unit or combination.
Ore.—700 (L plus 40) any unit or combination.
S. C.—700 (L plus 40) any unit or combination.
Utah.—700 (L plus 40) any unit or combination, or 3 times unladen weight.
Wash.—750 (L plus 40) any unit or combination.
W. Va.—1330-1000-670 (L plus 40) applies to highways dependent on type of bridges therein.
Wyo.—600 (L plus 40) 2 or more consecutive axles and any unit or combination.

Z—Comments on Weight Chart

- Ark.—Maximum gross weights subject to maximum capacity based on tires sizes.
Calif.—18,000 lbs. of vehicles registered prior to 1930.
Conn.—90% of vehicle gross.
D. C.—Solid tires, when permitted, allowed 10% less than pneumatics.
Fla.—18,000 lbs. with power brakes and 6 tires. "For hire" vehicle weights and sizes are not shown. (Solid tire "for hire" vehicles not permitted.)
Md.—20,000 lbs. axle weight allowed on 4 wheel vehicles drawing semi-trailer equipped with pneumatic tires.
Minn.—7,200 lbs. when axles spaced under 8 ft. apart.
Mo.—Sizes and weights in cities of 75,000 or over are not shown.
Mont.—8,400 lbs. axle weight for 4-wheeled vehicles where axles are less than 8 feet apart.
Nev.—Regulated carriers are permitted a maximum width of 98 inches; axles on buses allowed 18,000 lbs. low pressure tires.
N. J.—Buses have detailed size restrictions. (See our size and weight book—page 73.)
N. D.—Only one semi-trailer permitted when used commercially.
Ore.—Special permit will permit maximum height of 12 ft. 6 in.
Pa.—38 in. minimum axle spacing between two rear axles of 6-wheeler; lower size restrictions for vehicles registered after June 29, 1937.
Vt.—No restriction on axle weights unless vehicle gross exceeds 20,000 lbs.
Wash.—Detailed table for axle spacing will be found on page 113 of NHUC Size and Weight Book.

SAFETY EQUIPMENT REGULATIONS STATE & ICC

REFLECTORS
BRAKES
FLARES AND FUSES
DIRECTIONAL SIGNALS
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Page 24

REFLECTORS
BRAKES
FLARES AND FUSES
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REFLECTORS													REFLECTORS														
STATE	Required On	In Excess		No. Required		Color		Location			Viability (Ft.)		STATE	Required On	In Excess		No. Required		Color		Location			Viability (Ft.)			
		Width (In.)	Length (Ft.)	Front	Rear	Side	Front	Rear	Side	Spacing on Side (Ft.)	Position from Ground (In.)	Front			Rear	Side	Need Approval	Width (In.)	Length (Ft.)	Front	Rear	Side	Spacing on Side (Ft.)	Position from Ground (In.)	Front	Rear	Side	Need Approval
I.C.C.	T. B. Trl. Semit over 5000 lbs. T. B. Trl. Semit over 3000.	80	20	2	2	4	4	4	4	24-60	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Ala.																											
Ark.	New Veh. CMV Vehicles, Comb.																										
Calif.	T-Trl. T. T-SemIT 20,000 gross or more T 3000 up unladen.																										
Colo.	New MV, Trl. SemIT; all CMV																										
Conn.	CMV	72	20	2	2	4	4	4	4	24-42	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
Del.																											
D.C.	CMV, Trl. SemIT																										
Fla.																											
Ga.																											
Idaho.																											
Ill.	PT. Bus. PT. Bus. PT. SemIT	80	25 20	1	1	4	4	4	4	LC NO 60 NO 60	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
Ind.	Vehicles, Comb.	80	1*	1*	1*	G	R	L	L	24-42	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
Iowa.	CMV, Trl. SemIT. New MV. Trl. & SemIT over 3000			1	2	W/X/A W/X/A W/X/A	R R R	L-E L-E L-E	L	24-42	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
Kan.	CMV, Trl. SemIT New MV. PT. FC.	60	20	1	2	A	R	2-E	2-E	24-60	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
Ky.																											
La.																											
Me.	MV clo'd body & high MV, Trl.	84	1* 2*	1*	1*	G/A G/A	R R	L L	L	TB	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	
Md.																											
Mass.	CMV & Trl 2 tons or over.																										
Mich.	T, 2 t or over, All Tr. Trl. B. MV	80	3*	3*	3*	G	R	L	L	Top	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	
Minn.	MV, Trl. SemIT																										
Miss.	New MV, Trl. SemIT All CMV																										

STATE	Brakes		Flares and Fuseses		Directional Signals		Insurance		Stoplights	
	Special Provisions For Trailers and Semi-Trailers	Applicable to*	Must Be Used By	Num-ber	Required	Must Be Approved	Compliance	Responsibility	Required	Must Be Approved
I. C. C.	Over 3000 lb. gross	(1) L	B, T, TRT	3	No	No	No	No	Yes	No
Ala.	No	(6) L	B, T, CMV	2	Yes DD	Yes	No	No	Yes DD	Yes
Ark.	Trailers	(6) L	M/C	3	Yes DD	Yes	No	No	Yes DD	Yes
Ariz.	Trailers	(6) L	M/C	3	Yes DD	Yes	No	No	Yes DD	Yes
Calif.	House Trailers, 1500 lb. or more	L	T over 2 ton, TRT	2	Yes DD	Yes	No	No	Yes DD	Yes
Colo.	Over 3000 lb. gross	(1) L	T over 1 ton	3	Yes DD	Yes	No	No	Yes DD	Yes
Conn.	Over 4000 lb.	L	PSMV, CMV ov. 14 Comb.	NS	Yes DD	Yes	No	No	Yes DD	Yes
Dela.	Over 4000 lb. gr. or 10 m.p.h.	L	T over 80 in. wide	3	Yes DD	Yes	No	No	Yes DD	Yes
D. C.	No				No	No	No	No	Yes DD	Yes
Fla.	2 axled Trl. q	(6) L	q		No	No	No	No	Yes DD	Yes
Ga.	Over 1500 lb. net	C	B, T, TRT	3	Yes DD	Yes	No	No	Yes DD	Yes
Idaho	Over 2000 lb. gross	(1) L	CMV, B	3	Yes DD	Yes	No	No	Yes DD	Yes
Ill.	Over 3000 lb. gross	D	T, B, CMV q	2	Yes DD	Yes	No	No	Yes DD	Yes
Ind.	Over 3000 lb. gross	(1) L	T	3	Yes DD	Yes	No	No	Yes DD	Yes
Iowa	Over 3000 lb. gross	(1) L	M/C/T	NS/3	No	No	No	No	Yes DD	Yes
Kans.	Semi-Trailers q	L	T q	3	No	No	No	No	Yes DD	Yes
Ky.	Over 1500 lb. net	(3) L	T, B, Comb.	3	Yes DD	Yes	No	No	Yes DD	Yes
La.	Trailers, 2 tons or more	B		3	No	No	No	No	Yes DD	Yes
Md.	No	CMV over 2t, B		3	No	No	No	No	Yes DD	Yes
Mass.	No	CMV over 5000 lbs.		3	No	No	No	No	Yes DD	Yes
Mich.	Over 3000 lb. gross	(6) L	M/C	3	Yes DD	Yes	No	No	Yes DD	Yes
Minn.	Over 1500 lb. gross	L	T, B, Tr. q	3	Yes DD	Yes	No	No	Yes DD	Yes
Miss.	Trailers over 1 ton q	(1) L	T, B q	NS	Yes	Yes	No	No	Yes DD	Yes
Mo.	q		q		Yes DD	Yes	No	No	Yes DD	Yes

KEY TO SYMBOLS—(State Commission Rulings Are Given in Italics)

q Means I.C.C. Regulations adopted by State Commission as to vehicles subject to its jurisdiction. (Other figures shown are a variation from such uniform regulations.)

GENERAL

- A—Amber
- B—Blue
- B & B—Buses
- C—Carriers
- CC—Common Carriers regular route
- CMV—Commercial Motor Vehicles
- Cert & Perm—Certificated & Permit Carriers
- Comb—Combinations
- Comb—Corner
- Enc—Each
- F—Front
- FHC—For Hire Carriers
- FHT—For Hire Trailers
- F/B—Front and Rear
- G—Green
- IC—Inside Corner
- LC—Lower Corner
- LP—Lower Part
- MC—Motor Carriers
- MTV—Motor Truck Vehicles
- MV—Motor Vehicles
- MMV—New Motor Vehicles
- NO—Not Over
- NS—Not Specified
- P—Purple
- Permit CC—Permit Carriers
- PC—Passenger Carriers
- P0—Points
- Pro—Upon Proclamation
- PS—Public Service
- PT—Property Transporters
- R—Red
- Semit—Semi-Trailers
- SB—School Bus
- T—Truck
- TB—Top and Bottom
- TC—Top Corners
- TL—Tail Light
- Tr—Tractor
- Tri—Trailer
- TRT—Tractor-trailer
- UC—Upper Corners
- UP—Upper Portion
- W—White
- X—Other Than
- Y—Yellow
- Y—Yes
- /—Or

BRAKES

- C—Adequate to control the movement of and to stop and to hold such vehicle, including two separate means of applying the brakes.
- D—"Adequate"; "sufficient to control"; "good and sufficient"; "efficient"; "serviceable."

L—Brakes operated by driver.

- (1)—So constructed if unit becomes disconnected brakes lock automatically.
- (3)—Required on every wheel.
- (5)—Air power or vacuum booster brakes (or electric in Fla. and Mich. and Wis.)
- *—Where no designation of the specific class (i.e., trailer or semitrailer) is made, both classes must be understood.

CLEARANCE LIGHTS

- (See table on next page)
- (1)—Except road roller, road machinery or farm tractor.
- (2)—Except passenger common carrier.

(3)—Except buses operated wholly in municipalities with illuminated intersections.

- (4)—Except small two-wheeled trailers of 1,000 pounds or less capacity towed closely behind motor vehicle (and semitrailers towed alone in New Hampshire and West Virginia), whose length including towing vehicle is not over 30 ft.
- (5)—Or which extends 40" or more to the left of the center of the chassis.
- (6)—Over 7 ft. in height or extending 4 inches beyond the front fender extremities.
- (7)—Over 8 ft. high.
- (8)—3 tons or over.
- (9)—Trucks over 2 tons.
- (10)—Trains under Special Permit.
- *—Reflectors may be substituted.

REFLECTORS

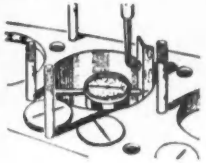

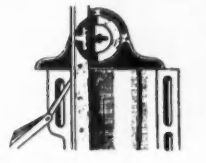
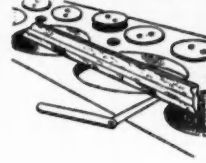
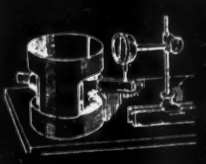
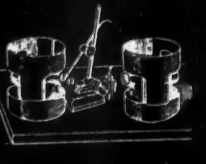
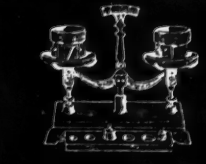
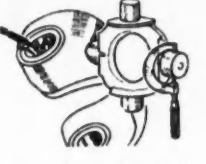


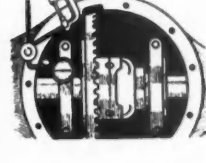
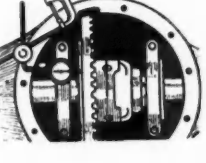
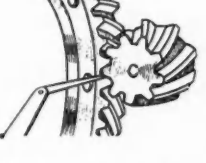

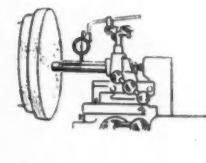
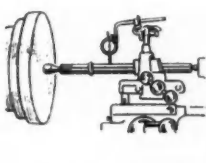
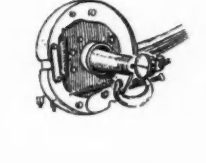
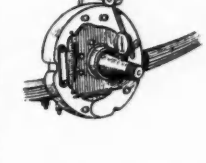




- *—May use in lieu of clearance lights.
- *—Grouped as identification lights.
- 1—Except road-roller, road machinery, or farm tractor.
- 2—Or whose load or any part extends 40 in. or more to the left of the center of the chassis.

DIRECTIONAL SIGNALS & STOPLIGHTS

- DD—When so loaded or constructed as to make hand signal infeasible.

STATE SAFETY EQUIPMENT REGULATIONS (Continued) Key to Symbols on Preceding Page

CLEARANCE LIGHTS										CLEARANCE LIGHTS													
STATE	Required On	In Excess		No. Required		Color		Location		Visibility (Ft.)	Need Approval	STATE	Required On	In Excess		No. Required		Color		Location		Visibility (Ft.)	Need Approval
		Width (In.)	Length (Ft.)	Front	Rear	Side	Front	Rear	Side					Spacing on Side	Position from Ground (In.)	Front	Rear	Side	Front	Rear	Side			Spacing on Side	Position from Ground (In.)
I.C.C.	B, T, Tr and Trl, Semit over 3000 lbs. gross	80	2	2	2	A	R	E	Top	500 500 500	..	Mont. §.	T, Trl, Autos.	80	..	..	4*	WG/Y	R	2-E	..	..	..
Ala.	MV (1)	80 & 30	..	..	..	A	R	E	Top	500 500 500	..	Neb.	MV (5)	80	..	1*	G	R	..	L	..	300	..
Ark.	PT, PC (3)	80	1	1	1	W	R	L	..	500 500	..	Nev. §.	CMV, T, Trl, Semit over 3000 lbs. gross	72	..	1*	G	..	..	..	..	..	..
Calif.	PT, PC (3)	80 or 30	3†	3†	4*	G	R	L	Top	500 500 500	Y	N.H.	Trl, Semit over 3000 lbs. gross	72	..	1*	..	..	..	W	L	..	..
Colo.	PT, PC (3)	80	2	2	2	G	G	2-E	E/R	500 500 500	Y	N.J.	Bus	72	..	2	..	..	..	1-E	..	500	..
Conn.	CMV, Comb.	72	1	1	1	G	R	L	26-43 Top	500 500 500	..	N.M.	PT, PC (3)	70	20	1	4	A	R	2-E	..	500	..
Del.	MV (1)	80	2	2	2	W	R	E	Top	500 500 500	..	N.Y.	MV	80	..	1*	Y	R	L	..	500	..	
D.C.	Bus	72	2	2	2	W/A	R/A	E	24-50	500	..	N.C.	MV	80	..	1	A	R	..	L	..	500	..
Fla.	MV (1)	80	1	1	1	B/P	R	L-E	U/P	500	..	N.D. §.	MV (1)	80	..	1	W	R	..	L	..	500	..
Ga.	PT, Bus	80	1	1	1	W	R	L	..	500 500	..	Ohio §.	MV (1)	70	..	1	W	R/Y	..	..	..	..	..
Ida.	MV (1)	80 & 25	3†	3†	3†	G	R	L	Top	500 500	..	Ola. §.	MV (1)	72	20	1	W	R	..	L	..	500	..
Ill.	MV, Comb.	80	1*	1*	1	G	R	L	..	200 200 150	..	Ore.	MV, Comb.	80	30	1	..	..	..	W	..	500	..
Iowa §.	T, Tr, Trl, Semit over 3000 lbs. gross	80	2	2	2	W/Y/A	R	1-E	..	..	..	Pa.	Vehicles (1)	80	30	3†	4*	A	R	..	..	500	..
Kans.	PT, PC (3)	80 or 30	1	1	1	A	R	L	Top	500 500 500	Y	R.I.	Bus	..	..	..	P/B	..	..	..	..	..	..
Ky.	Trailer	84	1	1	1	R/G	R	L	..	200 200 500	..	S.C.	T (9), Tr, Trl, B	80 or 30	2	2	G	R	..	..	..	..	..
La.	MV (1)	70 & 15	1	1	1	A	R	L	Top	500 500 500	Y	Tenn. §.	MV (1)	80	..	1*	W	R	..	..	..	..	..
Me.	Trailer (4)	84	1*	1*	1*	W	R	L	..	Y Y	..	Tex. §.	MV (1)	70	70	1*	W	R	..	..	..	..	..
Md.	T, Trl, CMV	90	1	1	1	XR	..	L	..	200 200	..	Utah §.	Vehicles (1)	80	30	3†	4*	G	R	..	..	..	..
Mass.	Bus	80	1	1	1	G	R	L	..	200 200	..	Vt.	MV	80	..	..	1	G	R	..	..	..	..
Mich.	T (9), Tr, Trl, B	80	3†	3†	1	G	R	L	Top	200 200	..	Va.	MV (6) or	84	..	2	A	R	..	..	..	..	..
Minn.	PT, PC	80	2	2	4	W/A	R	L	Top	500 500 500	..	Wash.	PT, PC, CMV (3)	80	..	2	Y	R	..	2-E	..	500	Y
Miss.	PT, PC (3)	80 or 30	3†	3†	4	G	R	L	Top	500 500 500	Y	W.Va. §.	Trl, Semit (4)	80	..	1	GB/A	R	..	..	No. 48	..	..
Mo. §.	PT, PC (3)	80	1	1	1	G	R	L	Top	500 500	..	Wis.	MV	70	20	1*	G	R	..	..	U/C	600	..
												Wyo. §.	Vehicles (1)	70	20	1*	G	R	..	..	..	500	..
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
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														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70	20	20	20	G	R
														70</									

 <p>Measure roundness of cylinder bore with dial gage. Desirable ..... .0005-.001 Serviceable ..... .002-.003 Repair or replace ..... .004</p>	 <p>Measure cylinder bore for taper with inside micrometer. Desirable ..... .001-.002 Serviceable ..... .003 Repair or replace ..... .005</p>	 <p>Measure squareness of bore with top of block, using Vee edge protractor and feeler gage. Desirable ..... .001-.002 Serviceable ..... .004 Repair or replace ..... .006</p>	 <p>Measure flatness of top of block with steel straightedge and feeler gage. Desirable ..... .003-.005 Serviceable ..... .007 Repair or replace ..... .010</p>
 <p>Measure clearance of piston in cylinder with feeler gage (clearance per inch of piston diameter). Desirable ..... .001 Serviceable ..... .0015-.002 Replace ..... .0025-.003</p>	 <p>Measure piston pin boss bore for parallelism with head, using surface plate and dial gage. Desirable ..... .001 Serviceable ..... .002 Repair or replace ..... .003</p>	 <p>Measure variation in compression height with surface plate and dial gage. Desirable ..... .003-.005 Serviceable ..... .010 Repair or replace ..... .020</p>	 <p>Measure difference in weight between pistons with balance scale. Desirable 1 lb. or less Serviceable 1 lb. or less Repair or replace 1-4 lb.</p>
 <p>Measure straightness of propeller shaft with dial gage. Desirable ..... .002-.004 Serviceable ..... .0015 Repair ..... .0010</p>	 <p>Measure clearance between universal joint pins and bushings with micrometer calipers and telescoping gage. Desirable ..... .001-.002 Serviceable ..... .005 if quiet Replace ..... .007 if noisy</p>	 <p>Measure end clearance of universal joint pins in bushings with feeler gage. Desirable ..... .001-.002 Serviceable ..... .005 Repair or replace ..... .010</p>	 <p>Measure fit of propeller shaft splines in universal joint yoke with dial gage. Desirable ..... .002-.004 Serviceable ..... .005 Repair or replace ..... .010</p>
 <p>Measure lateral trueness of differential case flange with dial gage before installing ring gear. Desirable ..... .001-.002 variation Serviceable ..... .003 variation Repair or replace ..... .004 variation</p>	 <p>Measure lateral trueness of assembled ring gear with dial gage. Desirable ..... .002-.003 variation Serviceable ..... .006 variation Replace ..... .010 variation</p>	 <p>Measure clearance between pinion and ring gear teeth with feeler gage. Desirable ..... .006-.008 Serviceable ..... .010 Repair or replace ..... .015</p>	 <p>Measure endwise clearance of pinion shaft with dial gage. Desirable ..... .001-.002 Serviceable ..... .003 Repair or replace ..... .005</p>
 <p>Measure all splined shafts for straightness with dial gage. Desirable ..... .001-.0015 Serviceable ..... .002 Repair ..... .003</p>	 <p>Measure all axle shafts for straightness with dial gage. Desirable ..... .001-.002 Serviceable ..... .004 Repair ..... .005</p>	 <p>Measure endwise clearance of axle shaft with dial gage. Desirable ..... .002-.004 Serviceable ..... .005 Repair or replace ..... .010</p>	 <p>Measure wheel bearing clearance with dial gage. Desirable ..... .001-.002 Serviceable ..... .005 Repair or replace ..... .008</p>
BALL BEARING			
 <p>Measure all ball bearings for radial or diametral clearance with dial gage (clearance per inch of diameter). Desirable ..... .0005-.001 Serviceable ..... .003 Replace ..... .005</p>	 <p>Measure all ball bearings for endwise clearance with dial gage (clearance per inch of diameter). Desirable ..... .001-.002 Serviceable ..... .004 Replace ..... .006</p>	 <p>Measure brake drum for roundness and concentricity with hub using dial gage mounted in hub. Desirable ..... .002-.004 Serviceable ..... .008 Repair or replace ..... .010</p>	 <p>Measure brake drum for taper or bell-mouth with dial gage mounted in hub. Desirable ..... .001-.002 Serviceable ..... .004 Replace ..... .006</p>

CYLINDER RECONDITIONING (CONTINUED)

REAR AXLE

BRAKES

All Measurements Are in Inches Unless Otherwise Noted. (Copyright 1939)

COMMERCIAL CAR JOURNAL
APRIL, 1939

TRUCK MAKES AND MODELS

TOE-IN
(in inches unless
otherwise shown)

CAMBER
(in degrees)

CASTER
(in degrees)

KING PIN SLANT
(in degrees)

AUTOCAR

RG, RH, RHT, 6RH, UT, UNF, UTT, UNFT, (1935-36)	0-1/4	1	2 1/2	8
D, 9T, 6D, UDT, 6UDF, RHD (1935-36)	0-1/4	1	1 1/4	8
DF, DFT, 6DF, DH, S (1935-36)	0-1/4	1	1	8
N (1935-36)	0-1/4	1	1 1/2	8
NT, DP (1935-36)	0-1/4	1	1 1/4	8
NF, 6N (1935-36)	0-1/4	1	1 1/4	8
NFT (1935-36)	0-1/4	1	1 1/4	8
T, 6T, UDFT, UNT, 6NF (1935); 6NF (1936)	0-1/4	1	1 1/2	8
TT, UDP (1935); T, 6T, UDFT, UNT, TT, UDF (1936)	0-1/4	1	2	8
UDF (1935-36)	0-1/4	1	1 1/4-2 1/4	8
UN (1935-36)	0-1/4	1	3 1/4	8
UNFT, 6UN (1935-36)	0-1/4	1	2 1/4	8
6UT (1935-36)	0-1/4	1	1/4 N	8
C (1935-36)	0-1/4	1	0	8
UD, 6UD, US, UNF (1936)	0-1/4	1	2 1/4	8
TF, 6TF (1936)	0-1/4	1	1/2 N	8
TFT (1936)	0-1/4	1	1/2-1 N	8
6X2RL (1937)	0-1/4	1	2 1/4	8
RM, RL, RLD (1937); A, 6X2RL (1938)	0-1/4	1	2 1/4-2 1/2	8
D, 2TR, 3TR, 4TR, 6X2DF (1937); D, 3TR (1938)	0-1/4	1	2-2 1/4	8
RMT, ITR (1937); 1UTR, 2UTR, 3UTR (1937-38); 4TR, RLD, 6X4DF (1938)	0-1/4	1	2	8
DF, DP (1937-38)	0-1/4	1	1 1/4-2	8
UD (1937); RMT, ITR, UD, 6X2UD (1938)	0-1/4	1	1 1/4-2	8
STR (1937)	0-1/4	1	1 1/4-2	8
6X2UD (1937); 4UTR (1937-38); DH (1938)	0-1/4	1	1 1/4-1 1/2	8
N (1937-38)	0-1/4	1	1 1/4-1 1/2	8
DH (1937); NF, 5UTR (1937-38)	0-1/4	1	1 1/4-1 1/2	8
T (1937)	0-1/4	1	1 1/4-1	8
6X2T (1937-38); 6X4TO (1938)	0-1/4	1	1 1/4	8
6X2NF (1937)	0-1/4	1	1 1/4-3/4	8
CP (1937)	0-1/4	1	1/4	8
S, 6X2UT (1937)	0-1/4	1	0-1/4	8
6X2UNF (1937)	0-1/4	1	N 1/4-1/4	8
UNF, UDP, US (1937); C, 6X4TC (1938)	0-1/4	1	0	8
UN, UT (1937-38); UNF, UDP, 6X2UN, 6X2UNF, 6X2UT (1938)	0-1/4	1	N 1/4-0	8
UDF, 6X2UN (1937); UDF, US, 6X4TD, 6X4UTO, 6X4UTD (1938)	0-1/4	1	N 1/4	8
B, RM, RL, 2TR (1938)	0-1/4	1	2-2 1/2	8
STR, 6X2DF (1938)	0-1/4	1	1 1/4-2 1/2	8
UA (1938)	0-1/4	1	1 1/4-2 1/2	8
UB (1938)	0-1/4	1	1 1/4-2 1/2	8
T, 6X2NF (1938)	0-1/4	1	1 1/4-1 1/2	8
A, B, RL, RB (1938)	0-1/4	1	1 1/4-1 1/2	8
RLS, DF, 6X4DF, URB, URL, URLS (1938)	0-1/4	1	N 1/4-1 1/2	8
N, NF, T, 4TR, 5TR, 6X2NF, 6X2T, UA, UB, 1UTR, 2UTR, 3UTR, 6X2UD (1938)	0-1/4	1	N 1/2-1	8
D, RFT, ITR, 2TR, 3TR, RLD, 6X2DF (1938)	0-1/4	1	0-1 1/2	8
DP, DH, UD (1938)	0-1/4	1	N 1/4-1/4	8
S, C (1938)	0-1/4	1	N 1/4-0	8
6X2RL (1938)	0-1/4	1	1 1/4-2	8
6X4TO (1938)	0-1/4	1	N 1	8
6X4TC (1938)	0-1/4	1	N 1-1/2	8
6X4TD, UDF, UN, UNF, 6X2UN, 6X2UNF (1938)	0-1/4	1	N 1/4-1/4	8
UT, 4UTR, 5UTR, 6X2UT (1938)	0-1/4	1	N 1-0	8
UDP, 6X4UTO (1938)	0-1/4	1	N 1 1/2	8
US, 6X4UTO (1938)	0-1/4	1	N 1 1/2-1	8
4X4N, 4X4S (1938)	0-1/4	1	5-7	8

BANTAM

60

BROCKWAY

80, 90 (1932-33)	1 1/2-3/8	1 1/2	11	1 1/2
120, 140 (1930-33); 100, 150 (1933); 90X, 96, 110, 125X, 130, 145, 150X4, 150X5 (1935)	1 1/2-3/8	2	1-2	9
141, 170, 195, 220 (1930-33); 160, 260 (1932-33); 160X, 165X, 170X, 175X, 190X, 220X, 240X, 260X (1935-39)	1 1/2-3/8	2	1-2	7
67, V1200 (1935-36); 78, 83, 88, 92, 94, 96, 110, 112, 125X, 128, 130, 145, 150X4, 150X5 (1936-39)	1 1/2-3/8	2	1-2	0

CHEVROLET

1/2-Ton (1935-39); 1/4- and 1-Ton (1937-39)

CORBITT

All 2-wheel drive (1936-38)

All 2-wheel drive (1939)

All front-wheel drive (1939)

DIAMOND T

216, 217, 226	1 1/2	1	1 1/2	9
241, 261	1 1/2	2	2 1/2	9
311, 326B, 325DR, 351, 376	1 1/2	2	2 1/2	7 1/2
410A	1 1/2	2	3	7 1/2
425, 510, 525, 603A, 901A, 740, 750	1 1/2	2	3	0
1516, 1201, 1203, 1602A, 1603, 2501	1 1/2	2	4 1/2	0
243, 311C, 312, 351C, 352 (1935)	1 1/2	2	2 1/2	7 1/2
412B, 412DR, 512B, 512DR (1935)	1 1/2	2	2 1/2	7 1/2
211A, 220, 227 (1935); 212A, 212B, 221, 228 (1936-37)	1 1/2	1	1 1/2	9
244, 313, 320, 353, 360 (1936-37)	1 1/2	2	1 1/2	7 1/2
412B, 412DR, 512B, 512DR (1936-37)	1 1/2	2	2 1/2	7 1/2
80 (1936-37)	1 1/2	1	3 1/2	9
80, 301, 304 (1938); 201, 305, 306 (1938)	1 1/2	1	4 1/2	9
404, 405, 406, 201C, 305C, 306C (1938-39)	1 1/2	1	1 1/2	9
509, 511, 512, 513, 514, 515, 401, 402, 507, 607, 609, 506, 610, 404C, 509C, 512C, 614C (1938-39)	1 1/2	1	1 1/2	8 1/2
412DR, 512B, 512DR (1938)	1 1/2	1	2 1/2	8
802, 803, 804, 803C, 804C (1938-39)	1 1/2	1	1 1/2	8

DODGE

KC, KCL (1935)	1 1/2	1	2	9
KH31A, KH32A, KH33A, K32A, K33A, K34A (1935)	1 1/2	2	1 1/2	7
LE-30, LE-31, LE-32, FD3-29, FD3-36, FD3-62, LF-35, LF-36, LF-37, FD4-29, FD4-36, FD4-62, LF-38, LF-39, FDD4-62, FDD4-85 (1936)	1 1/2	2	1 1/2	7
K46A, K46A, K47A, K48A (1935)	1 1/2	2	1 1/2	7
LH-46, LH-46, LH-47, LH-48, FD6-36, FD6-51, FD6-12, FD6-60 (1936)	1 1/2	2	1 1/2	7
K52 Special (1936)	1 1/2	2	3 1/2	9
K80A, K61A, K62A (1935); LM-70, LM-71, LK-60,	1 1/2			

FRONT END

ALIGNMENT

N—Negative. T—Toe-in.

TRUCK MAKES AND MODELS

TOE-IN
(in inches unless
otherwise shown)

CAMBER
(in degrees)

CASTER
(in degrees)

KING PIN SLANT
(in degrees)

DODGE—Continued

LK-61, LK-62, LK-63 (1936); ML, MK (1937)	1 1/2-3/8	1	2	8
RL, RK (1938); TL, TK, TLD, TKD (1939)	1 1/2-3/8	1	2	8
LC, FDI-16	1 1/2-3/8	1	2	9
MC, FE1-16, PT-50, MD, FE2 (1937); RC, RD (1938); TC, TD-15, TD-20, TD-21 (1939)	1 1/2	1 1/2	2	4
ME, FE3, MF, FE4 (1937); RE, RF (1938); TE, TF, TG, TH (1939)	1 1/2-3/8	2	1 1/2	7
MG, MH, FE5 (1937); RG, RH (1938)	1 1/2-3/8	2	2	8
MO, MP (1937); RO, RP (1939)	1 1/2-3/8	1	2 1/2	8

FEDERAL

X8, X8R (1930-36)	1/4	1	2 1/2	0
E4B (1933)	1/4	2	3 1/2	0
A7, A8, 30, 36, 37, 40 (1931-35)	1/4	2	3	7 1/2
15A, 15B, 15X, 20A, 20B, 20C, 21, 22 (1933-34)	1/4	1	1 1/4	7 1/2
25A, 25B (1933-34)	1/4	2	1 1/4	7 1/2
C7, C7W, C8, C8W (1934-36)	1/4	1	2 1/2	8
15D, 18D, 20D, 25D (1935)	1/4	1	1 1/4	7 1/2
T10B, T10W (1937)	1/4	1	3	8 1/2
X8, X8R (1937)	1/4	1	2 1/2	0
10E, 9, 9E, 11, 11E, 15D, 18D, 20D, 25D, 28D, 29D, 40E, 50E, C7, C8, C7W, C8W (1938-39)	1/4	1	3	8
11K, 12K, 14K, 15K, 18K, 20K, 25K, 29K, 75K, 80K, 85K, 89K, 40F, 50F, 62, 63, 65, 66	1/4	1	3	8

FORD

A Commercial Car (1928-31)	1/2	2-1/4	6 1/2-3 1/2	7
AA Truck (1928-31)	1/2	2-1/4	5-3	7
B (4 and 8 cyl.) Commercial Car (1932)	1/2	2-1/4	9-4 1/2	7
BB (4 and 8 cyl.) Truck (1932-33-34)	1/2	2-1/4	5-3	7
46 Commercial (1933-34); 50 Commercial (1935)	1/2	2-1/4	9-4 1/2	7
51 Truck (1935-36)	0	3/4-1/4	5-3	8 1/2
67 Commercial Car (1936)	1/2	1-1/4	9-4 1/2	8 1/2
73, 77 Commercial Car (1937)	1/2	1-1/4	9-4 1/2	8 1/2
75, 79 Truck (1937)	0	3/4-1/4	5-3	8 1/2
81T, 81TT (1938); 91T, 91TT, 91TT, 91TT (1939) Trucks	0	3/4-1/4	5-3	8 1/2
81Y, 82Y (1938); 91Y, 92Y (1939) 1-Ton	1/10	1/4	8	8
81C, 82C (1938); 91C, 92C (1939) Commercial	1/2	1	8	8
911W, 991W, 91W, 99W, 917W (1939) (C.O.E.)	0	1/4	1-3 1/2	8 1/2

FWD

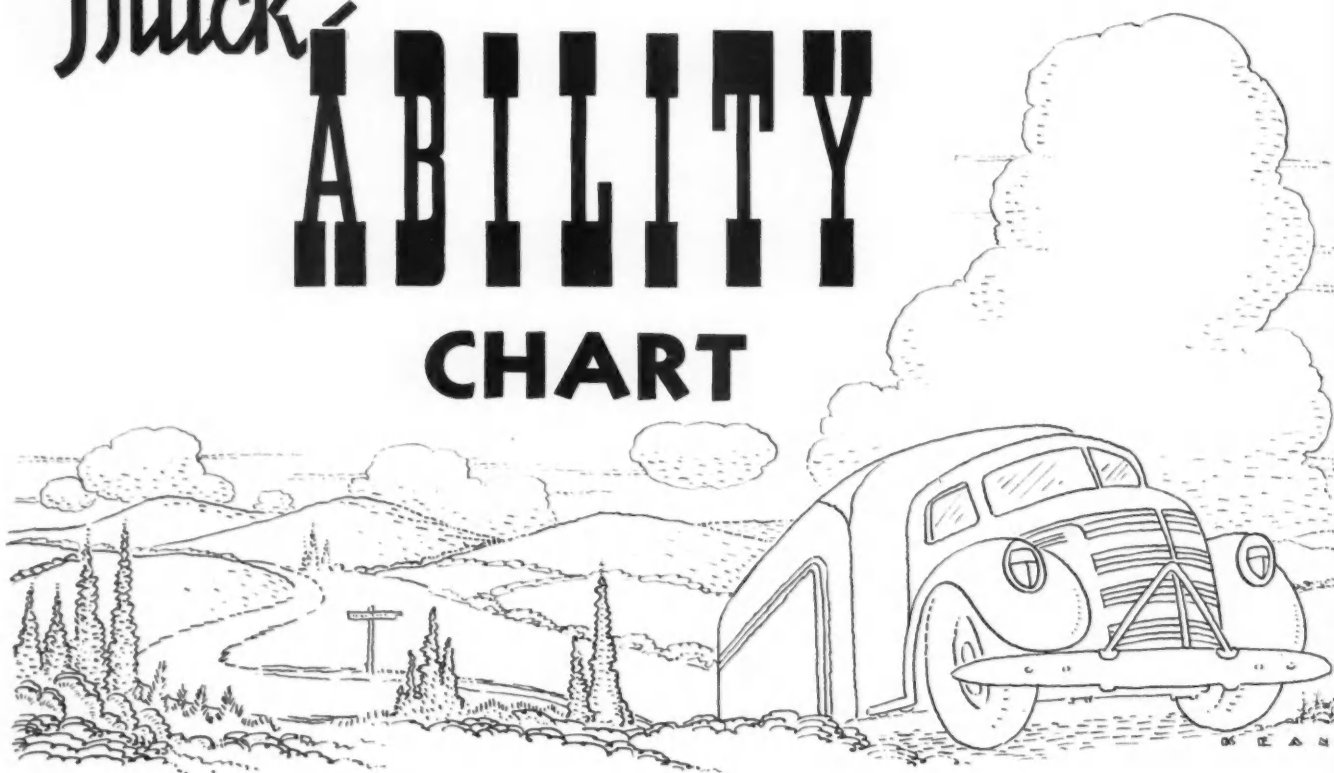
M5, M7, HS, HG, MJ5, MJ6, M10, MX6X6, MJ6X6	0	1 1/2	2	4 1/2
All others	0	1 1/2	2	0

GENERAL MOTORS

T16, T18	1 1/2-3/8	1 1/2	2	7 1/2
T23, T46, T51, T61, T73, T90, T74	1 1/2-3/8	1	2	8
T33, T43	1 1/2-3/8	1	2-4	8
T75, T83, T84SX, T85, T95, T110, T130, T78	1 1/2-3/8	1	2 1/2	7 1/2
T14 (1936)	1 1/2-3/8	1 1/2	2 1/2	7 1/2
T18, T16H (1936)	1 1/2-3/8	1 1/2	3	7 1/2

T16, T18H, T23, T23H, T33, T33H, T46, T61, T61H (1936); F16, T16H, F16H, T18, F18, T18H, F18H, T23, F23, T23H, F23H, T33, F33, T33H, F33H, T46, F46, T46H, F46H, T61, F61, T61H, F61H (1937)	1 1/2-3/8	1	1 1/2	8
T16H, F16, F16H, F23, F23H, T23, T23H, T33, T33H, (1938)	1 1/2-3/8	1	1 1/2	8

Truck- ABILITY CHART



THE accompanying chart makes it easy to determine the maximum grades which a truck of known engine torque, rear axle ratio, wheel diameter (including tire) and gross weight will climb in either high or low gear. It can also be used to determine the maximum engine torque necessary to climb a hill of any given grade if the rear axle ratio, transmission low gear ratio, gross weight and wheel size are known. The chart is easy to use and does not require a knowledge of mathematics or engineering. Simply follow instructions.

To Find Grade Ability

1. Locate on horizontal scale across bottom of chart, the point corresponding to maximum engine torque.
2. From this point proceed vertically upward to intersection with inclined line representing the rear axle ratio.
3. From this point proceed horizontally right or left to intersection with inclined line representing wheel diameter.
4. From this point proceed vertically upward to intersection with inclined line representing gross vehicle weight.
5. From this point proceed horizontally left to scale on left hand side of chart where maximum grade ability in high gear may be read.

To Find Grade Ability in Low

6. From point of intersection described in Instruction 4 proceed horizontally left or right to intersection with inclined line representing low gear ratio.
7. From this point proceed vertically upward to scale across top of chart where low gear grade ability may be read.

Example

The dotted lines in the chart correspond to an example. The engine torque is 288 lb. ft., the axle ratio is 6.5-1, the wheels are 34 in. in diameter and the gross weight is 19,000 lb. To work the example:

8. Locate 288 lb. ft. on the torque scale across the bottom of the chart.
9. From this point proceed vertically upward to the point of intersection with the line representing 6.5 rear axle ratio.
10. From this point proceed horizontally right to the intersection with the line representing 34 in. wheels.
11. From this point proceed vertically upward to the intersection with the line representing 19,000 lb.
12. From this point proceed horizontally left to the scale which gives the answer of 4.75 per cent grade.
13. If the low gear reduction is 6.5 stop at intersection with line representing 6.5 in proceeding left in Instruction 12.

14. From this point proceed vertically upward to the low gear scale which gives the answer of 39 per cent grade.

Both of these answers are correct. Any grade ability problem can be worked out on this chart if the factors outlined are known and they fall within the range of the chart.

To Find Required Torque

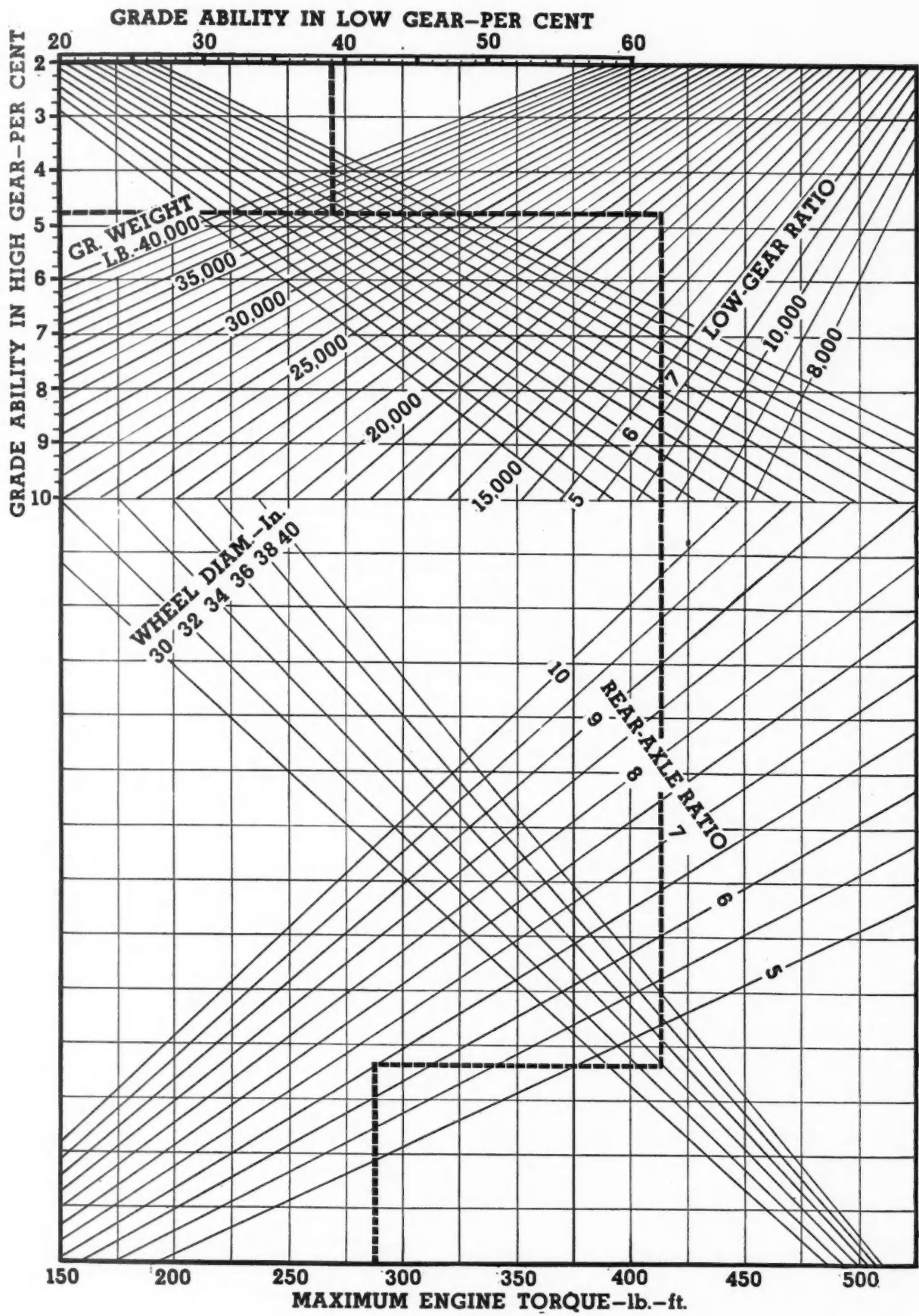
If the required hill climbing ability is known and it is desired to determine the maximum engine torque required to give this hill climbing ability simply work the chart backward.

To Find Other Factors

To find Gear Ratio required for a given grade, or Wheel Diameter Permissible to Climb a Given Grade, or Gross Vehicle Weight Limit for a Given Grade when other factors are known, locate the maximum engine torque and operate the chart in the usual manner to the line representing the unknown quantity. Then locate the known grade ability and work in reverse of the usual operation until that line intersects with the one resulting from forward operation. The intersection of the lines in the vicinity of the slanting line representing the unknown factor will determine the value of this factor.

TO FIGURE:

1. Grade Climbing Ability of Truck With Given Load.
2. Engine Torque Required to Climb a Given Grade . . .



3. Gear Ratio Required for a Given Grade . . . 4. Wheel Diameter Permissible to Climb a Given Grade . . . 5. Gross Vehicle Weight Limit for a Given Grade

TRUCK SPEED Chart



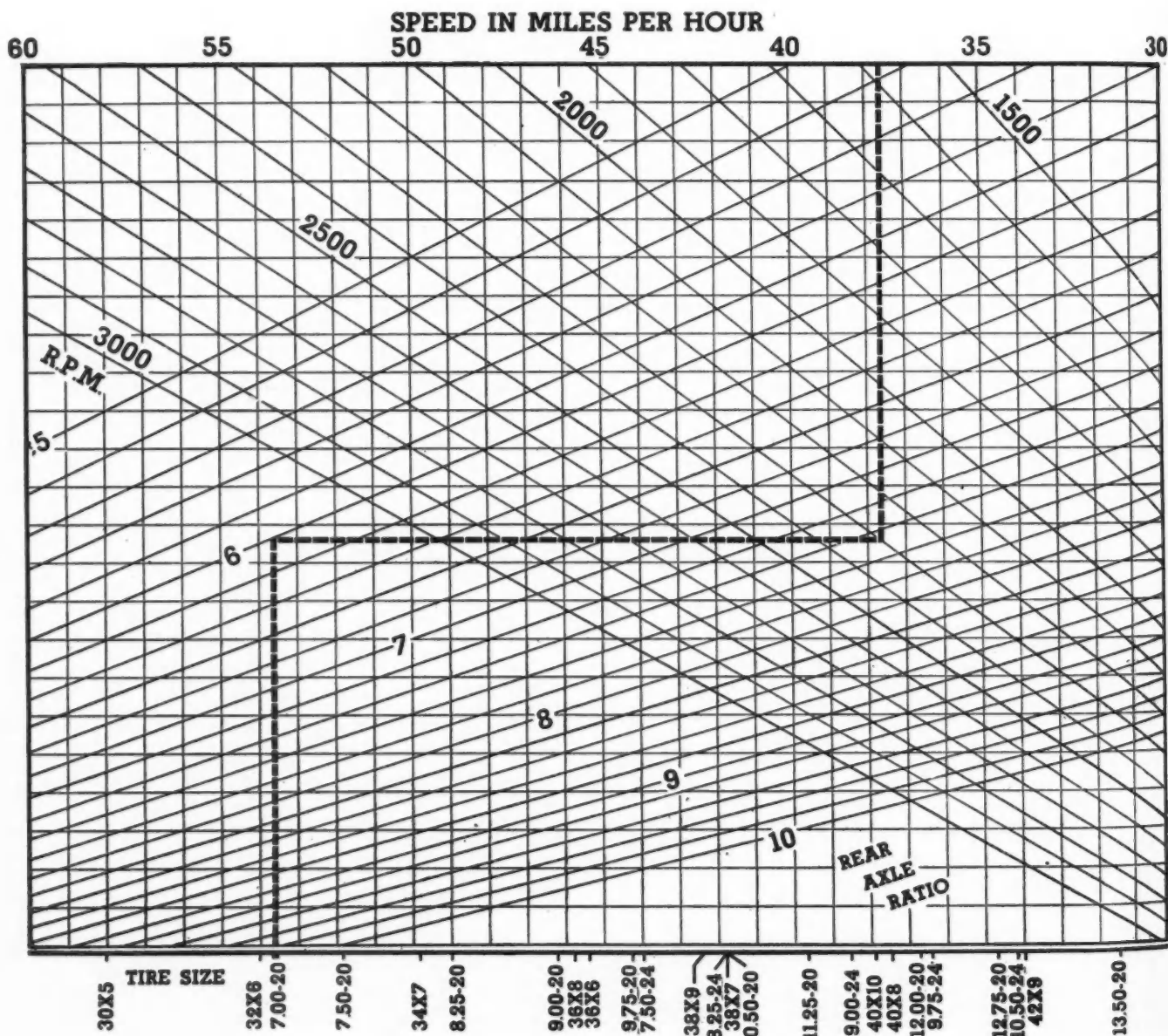
THE accompanying chart will determine the vehicle speed for any given engine speed when the tire size and rear axle reduction are known.

To Determine Truck Speed

1. Locate the point in the scale across the bottom of the chart which corresponds to the known tire size.
2. From this point proceed vertically upward to intersection with inclined line representing rear axle reduction ratio.
3. From this point proceed horizontally right or left to the intersection with line representing engine speed.
4. From this point proceed vertically upward to scale across top of chart where the m.p.h. speed of the vehicle is shown.

To Determine Engine Speed

5. Locate the point in the scale across bottom of the chart which corresponds to the known tire size.
 6. From this point proceed vertically upward to intersection with inclined line representing rear axle reduction ratio.
 7. Through this point draw horizontal line.
 8. Locate given truck speed in scale across top of chart.
 9. Proceed vertically downward to intersection with drawn horizontal line which will indicate required engine speed.
- The dotted line on the chart simply represents an example of how the chart can be used.



TRANSPORTATION ENGINEERING Data

FORMULAS

VEHICLE SPEED

$$\text{MPH} = \frac{\text{RPM} \times R}{168 \times \text{FGR}}$$

$$\text{RPM} = \frac{\text{MPH} \times 168 \times \text{FGR}}{R}$$

MPH = Miles Per Hour
RPM = Engine Revolutions per Minute
R = Rolling Radius
FGR = Final Gear Ratio

GRADE ABILITY

$$\text{GA} = \text{TE} - \text{RR}$$

$$\text{RR} = \text{Road Resistance} = .012 \times \text{GVW}$$

GVW = Gross Vehicle Weight

TRACTION EFFORT

$$\text{TE} = \text{lb. in. Torque} \times \text{FGR} \times \text{EFF} + \text{by R}$$

$$\text{EFF} = \text{Efficiency} = .90 \text{ for all Rear Axles except Worm then .85}$$

$$\text{R} = \text{Rolling Radius}$$

$$\text{lb. in. Torque} = 12 \times \text{Torque in lb. ft.}$$

DRAWBAR PULL

$$\text{DP} = \frac{.90 \times .65 \times D \times \text{FGR}}{R} - .012 \text{ GVW}$$

DP = Drawbar Pull
D = Piston Displacement
R = Rolling Radius
FGR = Final Gear Ratio
GVW = Gross Vehicle Weight

MAXIMUM TORQUE

$$\text{Torque in lb. ft.} = .70 \times \text{cu. in. Piston Displacement. (This is approximate and should be used only when actual torque is not known.)}$$

TORQUE AT PEAK

BRAKE HORSEPOWER

$$\text{Torque at Peak BHP} = \frac{\text{BHP} \times 5252}{\text{RPM}}$$

MAXIMUM TORQUE

$$\text{Maximum Torque} = \frac{\text{Torque at Peak HP} \times 5}{4}$$

PISTON DISPLACEMENT

$$\text{Piston Displacement in cu. in.} = \frac{B \times B \times .7854 \times S \times \text{No. of Cylinders}}{4}$$

B = Bore
S = Stroke

FINAL GEAR RATIO

$$\text{FGR} = \frac{\text{GA} \times r \times \text{GVW}}{T \times .90}$$

GA = Grade Ability
r = Effective Wheel Radius
GVW = Gross Vehicle Weight
T = Torque in lb. in.

AMA HORSEPOWER

$$\text{AMA HP} = \frac{B \times B \times \text{No. of Cyl.}}{2.5}$$

B = Cylinder Bore

LIGHT TRUCK BALLOON

Tire Size	Lb. Pressure for Max. Load	Maximum Load Capacity (Lb.)
5.50/16 4 Ply	30	810
5.50/16 6 Ply	36	900
6.00/15 4 Ply	28	870
6.00/15 6 Ply	36	1,010
6.00/16 4 Ply	28	915
6.00/16 6 Ply	36	1,085
6.00/17 6 Ply	40	1,230
6.50/16 4 Ply	32	1,135
6.50/16 6 Ply	40	1,290
7.00/15 6 Ply	40	1,415
7.00/16 6 Ply	40	1,485
7.00/17 6 Ply	40	1,580
7.50/16 6 Ply	40	1,660
7.50/16 8 Ply	48	1,850

TIRE CAPACITIES

Tire & Rim Association
Sizes, Loads and Pressures

BALLOON

Tire Size	Lb. Pressure for Max. Load	MAXIMUM LOAD CAPACITY					
		1 Tire	4 Tires	6 Tires	10 Tires	14 Tires	18 Tires
5.50/20	45	1,225	4,900	7,350	12,250	17,150	22,050
6.00/20	45	1,400	5,600	8,400	14,000	19,600	25,200
6.50/20	50	1,550	6,200	9,300	15,500	21,700	27,900
6.50/20	50	1,700	6,800	10,200	17,000	23,800	30,600
7.00/17	55	1,725	6,900	10,350	17,250	24,150	31,050
7.00/18	55	1,800	7,200	10,800	18,000	25,200	32,400
7.00/20	55	1,950	7,800	11,700	19,500	27,300	35,100
7.50/17	55	1,950	7,800	11,700	19,500	27,300	35,100
7.50/18	55	2,025	8,100	12,150	20,250	28,350	36,450
7.50/20	55	2,200	8,800	13,200	22,000	30,800	39,600
7.50/24	55	2,500	10,000	15,000	25,000	35,000	45,000
8.25/18	60	2,450	9,800	14,700	24,500	34,300	44,100
8.25/20	60	2,650	10,600	15,900	26,500	37,100	47,700
8.25/22	60	2,850	11,400	17,100	28,500	39,900	51,300
8.25/24	60	3,025	12,100	18,150	30,250	42,350	54,450
9.00/15	85	2,650	10,600	15,900	26,500	37,100	47,700
9.00/18	85	3,000	12,000	18,000	30,000	42,000	54,000
9.00/20	85	3,250	13,000	19,500	32,500	45,500	58,500
9.00/22	85	3,500	14,000	21,000	35,000	49,000	63,000
9.00/24	85	3,650	14,600	21,900	36,500	51,100	65,700
9.75/15	70	3,175	12,700	19,050	31,750	44,450	57,150
9.75/18	70	3,600	14,400	21,600	36,000	50,400	64,800
9.75/20	70	3,900	15,600	23,400	39,000	54,600	70,200
9.75/22	70	4,200	16,800	25,200	42,000	58,800	75,600
9.75/24	70	4,400	17,600	26,400	44,000	61,600	79,200
10.50/18	75	4,400	17,600	26,400	44,000	61,600	79,200
10.50/20	75	4,700	18,800	28,200	47,000	65,800	84,600
10.50/22	75	5,000	20,000	30,000	50,000	70,000	90,000
10.50/24	75	5,200	20,800	31,200	52,000	72,800	93,600
11.25/18	80	5,100	20,400	30,600	51,000	71,400	91,800
11.25/20	80	5,450	21,800	32,700	54,500	76,300	98,100
11.25/22	80	5,800	23,200	34,800	58,000	81,200	104,400
11.25/24	80	6,050	24,200	36,300	60,500	84,700	108,900
12.00/20	85	6,250	25,000	37,500	62,500	87,500	112,500
12.00/24	85	6,950	27,800	41,700	69,500	97,300	125,100
12.75/20	90	7,200	28,800	43,200	72,000	100,800	129,600
12.75/24	90	8,000	32,000	48,000	80,000	112,000	144,000
13.50/20	95	8,200	32,800	49,200	82,000	114,800	147,600
13.50/24	95	9,100	36,400	54,600	91,000	127,400	163,800

HIGH PRESSURE

Tire Size	Lb. Pressure for Max. Load	1 Tire	4 Tires	6 Tires	10 Tires	14 Tires	18 Tires
30x6	75	1,700	6,800	10,200	17,000	23,800	30,600
32x6, 8 Ply	75	1,950	7,800	11,700	19,500	27,300	35,100
32x6, 10 Ply	80	2,200	8,800	13,200	22,000	30,800	39,600
34x7	85	2,800	11,200	16,800	28,000	39,200	50,400
36x8	90	3,500	14,000	21,000	35,000	50,400	64,800

ENGINE SERVICE

Specifications

INCLUDING TUNE-UP DATA

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs "TC B-Before A-After"	Spark Occurs Fly- Wheel Teeth "TC B-Before A-After"	Crankshaft Speed at Comp. Pressure at
						°TC	Flywheel Teeth/TC		Intake	Exhaust	Make	Type	Size	Gap				
AUTOCAR																		
RH, DF, RHT, DT, DFT, RHD, DP, 6D, DH, UD, UDF, UDT, UDP, 6RH, 6DF, 6UD, UDFT	Own 358	6-4x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	2 COM	$\frac{1}{8}$	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
N, NT, 6N, UN, UNT, 6UN, 4X4DF, 4X4N	Own 404	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	2 COM	$\frac{1}{8}$	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
NF, NFT, 6NF, UNF, UNFT, 6UNF, S, US, N60C, 4x4NF	Own 453	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	2 COM	$\frac{1}{8}$	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
TF, TFT, 6TF	Wau 6RB	6-5x5 $\frac{1}{2}$	Ala	Top	40-1750 10" A	3 $\frac{1}{2}$ " A		.020	.006	.010	Ch	2 COM	$\frac{1}{8}$	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
RM, RL, RMT (1937)	Own 315	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	8 COM	18mm	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
DP, D, ITR, 6x2RL, RLD, UD, IUTR, UDP, 6x2UD (1937)	Own 358	6-4x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	O	$\frac{1}{8}$	P	D	8 $\frac{1}{2}$ " B	1 $\frac{1}{2}$ " B	90
DF, 2TR, 6x2DF, DH, UDF, 2UTR, 6x2UN, 4x4DF, 4x4N, 6x4DF (1937)	Own 404	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	O	$\frac{1}{8}$	P	Z	2" B	$\frac{1}{8}$ " B	90
6x2UNF, 3UTR, 4UTR, 3TR, 4TR, 6x2NF, C, 4x4NF (1937)	Own 453	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	O	$\frac{1}{8}$	P	Z	2" B	$\frac{1}{8}$ " B	90
6T, UT, UTT, 6UT, N75C, 4x4S (1936-37), C, T, TT, 6x2T, 6x2UT, 5TR, 5UTR, 6x4TO, 6x4UTO	Own 501	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.020	.015	.018	Ch	8 COM	18mm	P	Z	2" B	$\frac{1}{8}$ " B	90
A, UA	Her JXB	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	35-2200 2"A			.010	.006	.006	Ch	O	$\frac{1}{8}$	P	Z	TC	TC	90
B, UB	Her JXC	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	35-2200 2"A			.010	.006	.006	Ch	O	$\frac{1}{8}$	P	Z	TC	TC	90
RB, URB	Own 315	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.018	.015	.018	Ch	8 COM	18mm	P	D	9" B	$\frac{1}{4}$ " B	90
RL, RLS, ITR, RLD, DP, 6x2RL, URL, URLS, UD, IUTR, UDP, 6x2UD	Own 358	6-4x4 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.018	.015	.018	Ch	2 COM	$\frac{1}{8}$	P		9" B	$\frac{1}{4}$ " B	90
DF, N, 2TR, DH, 6x2DF, 6x4DF, UDF, UN, 2UTR, 6x2UN	Own 408	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		0.18	.015	.018	Ch	8 COM	18mm	P		2" B	$\frac{1}{4}$ " B	90
4x4DF	Own 447	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	Ala	Top	40-2200 TC	TC		.018	.015	.018	Ch	8 COM	18mm	P		2" B	$\frac{1}{4}$ " B	90
NF, 3TR, 4TR, S, 6x2NF, UNF, 3UTR, 4UTR, US, 6x2UNF, 4x4N																		
BANTAM (1938-39)																		
4-2, 2x3	Own	4-2, 2x3	Al	Top	8.5-30	19" B	4 $\frac{1}{2}$	.011	.011	.012	Ch	HIO	14mm	.025	.022 TC	TC	120	90
BROCKWAY																		
78 (1936-39)	Con 24B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	20-20	2" B	1 $\frac{1}{2}$ " B	.015	.010	.010	Ch	8 COM	18mm	.025	.020 8" B	2 $\frac{1}{2}$ " B	90	90
87, 90X (1936)	Con 28B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	20-20	5" B	1 $\frac{1}{2}$ " B	.012	.008	.010	Ch	0 COM	$\frac{1}{8}$	.025	.020 5" B	1 $\frac{1}{2}$ " B	90	90
83, 88, 92, 94 (1936-39)	Con 25B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	20-20	5" B	1 $\frac{1}{2}$ " B	.012	.008	.010	Ch	8 COM	18mm	.025	.020 5" B	1 $\frac{1}{2}$ " B	90	90
125X (1936-39)	Con 31B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
96, 110, 130 (1936-39)	Con 29B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
145 (1936-39)	Con 31B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
150X4, 150X5 (1936-39)	Con 32B	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
160X, 180XSBT, 165X (1936-39)	Con 32B	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
170X (1936-39)	Con 33B	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	30-20	5" B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020 15" B	5 $\frac{1}{2}$ " B	90	90
175X, 180X-SBT Spec., 220X (1936-39)	Con 34B	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	30-20	5" B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020 15" B	5 $\frac{1}{2}$ " B	90	90
195X (1936-39)	Con 33B	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	30-20	5" B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020 15" B	5 $\frac{1}{2}$ " B	90	90
240X, 260X (1936-39)	Con 35B	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	AI	Bot	30-20	5" B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020 15" B	5 $\frac{1}{2}$ " B	90	90
112, 128 (1938-39)	Con 38B	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	30-20	8" B	2 $\frac{1}{2}$ " B	.015	.012	.012	Ch	8 COM	18mm	.025	.020 8 $\frac{1}{2}$ " B	3" B	90	90
CHEVROLET																		
$\frac{1}{2}$, 1 $\frac{1}{2}$ Ton (1934)	Own	6-3 $\frac{1}{2}$ x4	CI	Top		4" B	1 $\frac{1}{2}$ " B	.006	.006	.013	AC	K10	14mm	.032	.018 10" B	3 $\frac{1}{2}$ " B	80	80
$\frac{1}{2}$, 1 $\frac{1}{2}$ Ton (1935)	Own	6-3 $\frac{1}{2}$ x4	CI	Top		8" B	3B	.006	.006	.013	AC	K11	14mm	.032	.018 5" B	1 $\frac{1}{2}$ " B	90	90
$\frac{1}{2}$, 1 $\frac{1}{2}$ Ton (1936)	Own	6-3 $\frac{1}{2}$ x4	CI	Top		9" B	3 $\frac{1}{2}$ " B	.008	.006	.013	AC	K11	14mm	.032	.018 5" B	1 $\frac{1}{2}$ " B	90	90
$\frac{1}{2}$, 1 $\frac{1}{2}$ Ton (1937)	Own	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	CI	Top	13 $\frac{1}{2}$ @ 2621	9" B	3 $\frac{1}{2}$ " B	.006	.006	.013	AC	47	14mm	.040	.018 5" B	1 $\frac{1}{2}$ " B	90	90
$\frac{1}{2}$, $\frac{3}{4}$, 1, 1 $\frac{1}{2}$ Ton (1938-39)	Own	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	CI	Top	13 $\frac{1}{2}$ @ 2621	9" B	3 $\frac{1}{2}$ " B	.006	.006	.013	AC	46	14mm	.040	.018 5" B	1 $\frac{1}{2}$ " B	90	90
CORBITT																		
12B (1936)	Wau 6BL	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 TC	TC		.010	.010-.012	.010-.012	AC	D8-D10	18mm	.030	.025 5" B			110
F15, 14B (1936-37)	Wau 6BK	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 TC	TC		.010	.012-.014	.012-.014	AC	D8-D10	18mm	.030	.025 5" B			110
14BT, Series 18, F18, Series 22 (1936-37)	Wau 6MK	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	CI	Bot	40-1500 7" A			.006	.008-.010	.012-.014	AC	D8-D10	18mm	.030	.025 7" B			110
Series 27D (1936)	Wau 6SRL	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	AI	Bot	40-1500 6" A			.009	.008-.010	.016-.018	AC	L8-L10	$\frac{1}{8}$	.030	.025 TC			110
F27, Series 35, 40 (1936-37)	Wau 6SRK	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	AI	Bot	40-1500 7" A			.006	.008-.010	.016-.018	AC	L8-L10	$\frac{1}{8}$	.030	.025 7" B			110
F12 (1936)	Wau 6BL	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 TC	TC		.010	.010-.012	.010-.012	AC	D8-D10	18mm	.030	.025 5" B			110
F23 (1936)	Wau 6SRL	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	AI	Bot	40-1500 6" A			.009	.008-.010	.016-.018	AC	L8-L10	$\frac{1}{8}$	.030	.025 TC			110
F35 (1936)	Wau 6RB	6-5x5 $\frac{1}{2}$	AI	Bot	40-1500 9" A			.006	.008-.010	.016-.018	AC	L8-L10	$\frac{1}{8}$	.030	.025 7" B			110
12B (1937)	Lyc WFC	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 TC	TC		.010	.010-.012	.010-.012	AC	KL-8	14mm	.030	.025 5" B			110
18BT, 22B (1937)	Wau 6MZ	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 7" A			.006	.008-.010	.012-.014	AC	D8-D10	18mm	.030	.025 7" B			110
22BT, F23 (1937)	Con 20-R	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500 5" B		1.9	.01365	.010-.012	.017-.018	AC		18mm	.030	.025			110
27DT (1937)	Con 21-R	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500 5" B		1.9	.01365	.010-.012	.017-.018	AC		18mm	.030	.025			110
13B, F12 (1937-39)	Con A6244	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500 5" B		1 $\frac{1}{2}$ " B	.012	.010	.012	AC	D8-D10	18mm	.030	.025 5" B	1 $\frac{1}{2}$ " B	110	110
17B, 14BT (1937-39)	Con M6290	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500 5" B		1 $\frac{1}{2}$ " B	.012	.010	.012	AC	D8-D10	18mm	.030	.025 5" B	1 $\frac{1}{2}$ " B	110	110
21B, F18 (1937-39)	Con E602	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 8" B		2 $\frac{1}{2}$ " B	.012	.007	.012	AC	D8-D10	18mm	.030	.025 8" B	2 $\frac{1}{2}$ " B	110	110
26D, 18BT (1937-39)	Con E603	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 8" B		2 $\frac{1}{2}$ " B	.012	.007	.012	AC	D8-D10	18mm	.030	.025 8" B	2 $\frac{1}{2}$ " B	110	110
22BT, F27 (1937-39)	Con 21R	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500 5" B		2B	.014	.012	.015	AC	D8-D10	18mm	.030	.025 10" B	3 $\frac{1}{2}$ " B	110	110
27DT, F35 (1937-39)	Con 22R	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	AI	Top	40-1500 5" B		2B	.014	.012	.015	AC	D8-D10	18mm	.030	.025 10" B	3 $\frac{1}{2}$ " B	110	110
F14 (1937-39)	Con M6271	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Bot	40-1500 5" B		1 $\frac{1}{2}$ " B				AC	D8-D10	18mm	.030	.025 5" B	1 $\frac{1}{2}$ " B	110	110
F19 (1937-39)	Con M6330	6-4x4 $\frac{1}{2}$	AI	Bot	40-1500 5" B		1 $\frac{1}{2}$ " B				AC	D8-D10	18mm	.030	.025 5" B	1 $\frac{1}{2}$ " B	110	110

GUIDE TO SYMBOLS AND ABBREVIATIONS

Al—Aluminum
As—Strut Type Aluminum
Aa—Anodized Aluminum
CA—Cast Alloy
CI—Cast Iron
St—Alloy Steel
TP—Tin Plated Cast Iron
C—Cold
H—Hot
Bot—Bottom
Top—Top
AC—AC

Ch—Champion
ED—Edison
L—Lbs.
Q—Qts.
Bud—Buda
Con—Continental
Her—Hercules
Lyc—Lycorning
Opt—Optional
Var—Variable
Wau—Waukesha
S—023-028

Z—018-022
ZZ—025-030
V—012-014
Y—0125-135
YY—014-016
SS—Semi Steel
COM—Commercial
H—015-025
E—018-020
D—018-024
K—020-025
P—018-023

Fleet operators
are invited to write
the Technical Department of **COMMERCIAL
CAR JOURNAL** for any
information that may
not be contained
in this table

OIL PRESSURES AND CONNECTING ROD DATA

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °C B-Before A-After	Spark Occurs Fly- Wheel Teeth B-Before A-After	Comp. Pressure at Cranking Speed
						°C	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
DIAMOND T																		
211, 227, 243, 212A, 212B, 228, 401, 402, 404, 405 (1935-1938)	Her JXA	6-3 1/2 x 4 1/2	CI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	76	3/8	.027	.020	TC	TC	98 1/2
220, 311, 221, 244, 313, 406, 507, 509, 611 (1935-38)	Her JXB	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	76	3/8	.027	.020	TC	TC	103
312, 351C, 320, 353, 607, 612, 613 (1935-38)	Her JXC	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	76	3/8	.027	.020	TC	TC	102
352, 380, 614 (1935-38) 614, 614C (1939)	Her JXD	6-4 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	76	3/8	.027	.020	TC	TC	100
412B (1935)	Her WXL	6-4 x 4 1/2	AI	Top	25-30	2°A	1 1/2 A	.010	.006	.010	AC	76	3/8	.027	.020	TC	TC	100
412DR, 512B, 512DR (1935-38) 803C, 804C (1939)	Her WXL3	6-4 1/2 x 4 1/2	AI	Top	25-30	2°A	1 1/2 A	.010	.008	.010	AC	76	3/8	.027	.020	TC	TC	100
80, 301 (1936-38) 201, 201C (1939)	Her QXB3	6-3 1/2 x 4 1/2	CI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	75	3/8	.027	.020	TC	TC	100
304, 401 (1937-38) 305, 305C, 306, 306C (1939)	Her QXC3	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	75	3/8	.027	.020	TC	TC	100
404, 404C (1939)	Her JXE3	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	73	3/8	.027	.020	TC	TC	100
406, 509, 509C (1939)	Her JXB	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	73	3/8	.027	.020	TC	TC	100
612, 612C (1939)	Her JXC	6-3 1/2 x 4 1/2	AI	Top	25-30	5°A	1 1/2 A	.008	.008	.010	AC	73	3/8	.027	.020	TC	TC	100
DODGE																		
KC, KCL, KH, Series LC	Own 201 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	6°A	2 1/2 A	.011	.006	.008	AC	K9	14mm	.025	.020	3°A	1 1/2 A	100
K32, K33, K34	Own 217 cu.in.	6-3 1/2 x 4 1/2	As	Top	30-40-30	6°A	2 1/2 A	.011	.008	.008	AC	K9	14mm	.025	.020	2°A	1 1/2 A	100
K35, K36, K37, K38, K45, K46, K47, K48	Own 241 cu.in.	6-3 1/2 x 4 1/2	AI	Top	30-40-30	TC	TC	.011	.008	.008	AC	K9	14mm	.025	.020	TC	TC	100
K50, K51, K52, K70, K71, K72	Own 309 cu.in.	6-3 1/2 x 5	As	Top	30-40-30	6°A	2 1/2 A	.010	.008	.010	AC	K9	14mm	.025	.020	4°B	1 1/2 B	100
LE Series	Own 201 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	6°A	2 1/2 A	.011	.006	.010	AC	K9	14mm	.025	.020	3°A	1 1/2 A	100
LF Series	Own 217 cu.in.	6-3 1/2 x 4 1/2	As	Top	30-40-30	6°A	2 1/2 A	.011	.008	.010	AC	K9	14mm	.025	.020	2°A	1 1/2 A	100
LG, LH Series	Own 241 cu.in.	6-3 1/2 x 4 1/2	AI	Top	30-40-30	TC	TC	.010	.008	.010	AC	K9	14mm	.025	.020	TC	TC	100
K50V, K51V, K52V, K60V, K61V, K62V	Own 309 cu.in.	6-3 1/2 x 5	As	Top	30-40-30	6°A	2 1/2 A	.010	.008	.010	AC	K9	14mm	.025	.020	3°B	1 1/2 B	100
MC, RC (1937-38)	Own 218 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	TC	TC	100
RD, MD Series (1937-38)	Own 218 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	TC	TC	100
RE, ME Series (1937-38)	Own 218 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1 1/2 B	100
RF, MF Series (1937-38)	Own 228 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1 1/2 B	100
RG, RH, MG, MH Series (1937-38)	Own 241 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	6°B	2 1/2 B	100
RL, RK, RO, RP, ML, MK Series (1937-38)	Own 333 cu.in.	6-3 1/2 x 5	Aa	Top	30-40-30	6°A	2 1/2 A	.011	.008	.012	Ch	J8	14mm	.025	.020	6°B	2 1/2 B	100
TC (1939)	Own 201 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	6°A	2 1/2 A	.014	.006	.010	Ch	J8	14mm	.025	.020	7°B	2 1/2 B	100
TD (1939)	Own 218 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	6°A	2 1/2 A	.014	.008	.010	Ch	J8	14mm	.025	.020	TC	TC	100
TE (1939)	Own 218 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	8°B	2 1/2 A	.014	.008	.012	Ch	J8	14mm	.025	.020	2°B	1 1/2 B	100
TF (1939)	Own 223 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	8°B	2 1/2 A	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1 1/2 B	100
TG, TH (1939)	Own 241 cu.in.	6-3 1/2 x 4 1/2	Aa	Top	30-40-30	8°B	2 1/2 A	.014	.008	.012	Ch	J8	14mm	.025	.020	6°B	2 1/2 B	100
TL, TK (1939)	Own 331 cu.in.	6-3 1/2 x 5	Aa	Top	30-40-30	6°A	2 1/2 A	.014	.008	.012	AI	A7	14mm	.025	.020	2°B	1 1/2 B	100
TLD, TKD (1939)	Own 331 cu.in.	6-3 1/2 x 5	Aa	Top	30-40-30	31°B	2 1/2 A	.014	.013	.013			14mm	.025	.020			100
FEDERAL																		
15X, 15, 15K 75, 75H, 75K	Her JXA	6-3 1/2 x 4 1/2	...	Top	25-1500	5°A	1 1/2 A	.008	.008	.010	AC	7 1/2	18mm	.025	.020	TC	TC	80
18X, 18K 20, 20K 21, 22, 80, 80H 80K	Her JXB	6-3 1/2 x 4 1/2	...	Top	25-1500	5°A	1 1/2 A	.008	.008	.010	AC	7 1/2	18mm	.025	.020	TC	TC	80
25, 25K 85, 85H 85K	Her JXC	6-3 1/2 x 4 1/2	...	Top	25-1500	5°A	1 1/2 A	.008	.008	.010	AC	7 1/2	18mm	.025	.020	TC	TC	80
30	Wau 6MS	6-3 1/2 x 4 1/2	CI	Top	35-1500	8°A	3A	.004	.010	.012	AC	18mm	18mm	.025	.020	TC	TC	80
40, 40F	Wau 6MK	6-4 1/2 x 4 1/2	CI	Top	35-1500	8°A	3A	.004	.010	.012	AC	18mm	18mm	.025	.020	TC	TC	80
50, 50F	Wau 6MZ	6-4 1/2 x 4 1/2	CI	Top	35-1500	8°A	3A	.004	.010	.012	AC	18mm	18mm	.025	.020	TC	TC	80
63, 66, C7, C8, C7W, C8W, C8H	Wau 6SRK	6-4 1/2 x 5 1/2	...	Top	35-1500	10°A	3 1/2 A	.004	.010	.012	AC	18mm	18mm	.025	.020	TC	TC	80
DM (1938)	Con W10	4-3 1/2 x 4 1/2	...	Top	16-1100	5°A	...	.008	.008	.012	AC	7 1/2	18mm	.025	.020	TC	TC	80
10	Her OOB	4-3 1/2 x 4 1/2	...	Top	26-2600	5°A	...	.008	.008	.010	AC	7 1/2	18mm	.025	.020	TC	TC	80
28	Her JXC	6-3 1/2 x 4 1/2	...	Top	26-2600	5°A	...	.008	.008	.010	AC	7 1/2	18mm	.025	.020	TC	TC	80
29, 29K 87H, 89, 89K	Her JXD	6-4 x 4 1/2	...	Top	35-1500	8°A	3A	.008	.008	.010	AC	18mm	18mm	.025	.020	TC	TC	80
40DR	Wau 6MK	6-4 1/2 x 4 1/2	CI	Top	35-1500	8°A	3A	.008	.008	.016	AC	18mm	18mm	.025	.020	TC	TC	80
T10B, T10W	Con 18R	6-4 x 4 1/2	...	Top	35-1500	TC	TC	.004	.008	.016	AC	18mm	18mm	.025	.020	TC	TC	80
X8RDR-X8R	Wau 6SRK	6-4 1/2 x 5 1/2	...	Top	35-1500	10°A	3A	.004	.008	.016	AC	18mm	18mm	.025	.020	TC	TC	80
9	Con 4140	4-3 1/2 x 4 1/2	...	Top	25-1500	TC	TC	.008	.008	.008	AC	18mm	18mm	.025	.020	TC	TC	80
11, 11K 11H	Her QXB3	6-3 1/2 x 4 1/2	...	Top	25-1500	TC	TC	.008	.008	.008	AC	18mm	18mm	.025	.020	TC	TC	80
12K, 14K	Her QXC3	6-3 1/2 x 4 1/2	AI	Top	25-1500	TC	TC	.008	.008	.008	AC	18mm	18mm	.025	.020	TC	TC	80
62, 65	Con 22R	6-4 1/2 x 5 1/2	AI	Top	25-1500	TC	TC	.014	.013	.018	AC	18mm	18mm	.025	.020	TC	TC	80
FORD																		
51, V8 (1935-36)	Own	8-3 1/2 x 3 3/4	CA	Top	30-2000	9 1/2°B	3B	.013	Y	.012-.013	Ch	7	18mm	.025	YY	4°B	1 1/2 B	90
75, V8 (1937)	Own	8-2 1/2 x 3 1/2	St	Top	30-3200	9 1/2°B	3B	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	110
76, V8 (1937)	Own	8-3 1/2 x 3 3/4	St	Top	30-2000	9 1/2°B	3B	.013	Y	Y	Ch	H10	18mm	.025	YY	4°B	1 1/2 B	100
81T, 817T, 81V, 81C (1938)	Own	8-3 1/2 x 3 3/4	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	100
82V, 82C (1938)	Own	8-2 1/2 x 3 1/2	CA	Top	30-2000	9 1/2°B	3B	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	105
91T, 917T, 911W, 91W, 917W, 91V, 91C (1939)	Own	8-3 1/2 x 3 3/4	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	100
95T, 957T, 951W, 95W, 957W (1939)	Own	8-3 1/2 x 3 3/4	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	100
92V, 922C (1938)	Own	8-2 1/2 x 3 1/2	St	Top	30-2000	9 1/2°B	3B	.013	Y	Y	Ch	H10	14mm	.025	YY	4°B	1 1/2 B	105
FWD																		
H5, T25	Wau 6BK	6-3 1/2 x 4 1/2	AI	Top	40-45	TC	TC	.010	.011	.015	Ch	6 COM	18mm	.025	.015	8°B		112
HQ, HM, HH6	Wau 6MK	6-4 1/2 x 4 1/2																

ENGINE SERVICE SPECIFICATIONS—Continued

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After	Intake Valve Closes T-After	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC B-Before	Spark Occurs Flywheel T-After B-Before	Comp. Pressure at Cranking Speed	
								Intake	Exhaust	Make	Type	Size	Gap					
SUA, SU	Wau 6SRL	6-4½x5½	Al	Top	40-45	10°A	3A	.004	.010	.018	Ch	O	7/8	.025	.015	3°B		
YU, MJ5, MJ6x6	Wau 6SRK	6-4½x5½	Al	Top	40-45	10°A	3A	.004	.010	.018	Ch	O	7/8	.025	.015	3°B	90	
MJ6	Wau 6-125	6-4½x5½	Al	Top	40-45	42°B	15B	.008	.012	.020	Ch	J8	14mm	.025	.015	3°B	96	
M10	Her HX6	6-5½x6	Al	Top	40-45	5°B		.010	.010	.016	Ch	O	7/8	.025	.015	3°B	90	
M7, M6x6	Wau 6RB	6-4½x5½	Al	Top	40-45	10°A	4A	.008	.008	.012	Ch	O	6 COM	.025	.015	3°B		
HG, HM, HH6, T32 (1939)	Wau MKR	6-4½x4½	Al	Top	35-1000	8°A	3A	.009	.009	.013	Ch		18mm	.025	.015			
CUA, CU (1939)	Wau MZR	6-4½x4½	Al	Top	35-1000	8°A	3A	.009	.009	.013	Ch			.025	.015			
SUA, SU (1939)	Wau RLR	6-4½x5½	Al	Top	35-1000	8°A	3A	.009	.009	.017	Ch			.025	.015			
YU, MJ5, MJ6, MJ6x6, T40 (1939)	Wau SRKR	6-4½x5½	Al	Top	35-1000	8°A	3A	.009	.017	.017	Ch			.025	.015			
M7, M6x6, T60, T65 (1939)	Wau RBR	6-5x5½	Al	Top	35-1000	10°A	4A	.007	.009		Ch			.025	.015			
GENERAL MOTORS																		
T84, T78, T78T (1935)	Own 450	6-4½x5	Al	Top	42-	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T83, T78, T78H (1935)	Own 400	6-4½x5	Al	Top	42-	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T81, T81W, T74, T74H (1935)	Own 331	6-3½x5	Al	Top	35-	8°A		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T43, T73, T73H (1935)	Own 257	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	G8	18mm	.035	Z	15°B		
T16 (1935)	Olds 6	6-3½x4½	Al	Top	30-	5°B		.010	.010	.010	AC	G8	18mm	.035	Z	15°B		
T18H (1935)	Own 239	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	K7	14mm	.025	Z	15°B		
T18, T23 (1935)	Own 221	6-3½x4½	Al	Bot	30-	4°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T22H, T33 (1935)	Own 257	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	K7	14mm	.035	Z	15°B		
T33, T33H (1935)	Own 286	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	K7	14mm	.025	Z	15°B		
T46H, T46 (1935)	Own 331	6-3½x5	Al	Top	35-	9°A		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T81 (1935)	Own 400	6-4½x5	Al	Top	42-	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T81H, T81 (1935)	Own 400	6-4½x5	Al	Top	42-2300	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T14, T16, T16H (1935)	Olds 6	6-3½x4½	Al	Top	30-	5°B		.006	.006	.010	AC	G9	18mm	.035	Z	15°B	108	
T18 (1935)	Own 239	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	K7	14mm	.025	Z	15°B		
T46, T74 (1935)	Own 331	6-3½x4½	Al	Top	30-	18°A		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T23, T73, T73H (1935)	Own 257	6-3½x4½	Al	Top	30-	4°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T74H (1935)	Own 331	6-3½x5	Al	Top	35-	4°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T78 (1935)	Own 400	6-4½x5	Al	Top	42-	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T78 (1935)	Own 450	6-4½x5	Al	Top	42-	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T14, T16, T16H, F16H (1937)	Olds 6	6-3½x4½	Al	Top	30-	6°B		.008	.008	.011	AC	K9	18mm	.035	Z	2°B	110	
T18, F18, T18H, F18H (1937)	Own 239	6-3½x4½	Al	Top	35-	4°B		V	V	V	AC	K7	14mm	.035	Z	15°B		
T23, T23H, F23H (1937)	Own 257	6-3½x4½	Al	Top	30-	4°B		V	V	V	AC	K7	14mm	.035	Z	15°B		
T33, F33, T33H, F33H (1937)	Own 286	6-3½x4½	Al	Top	30-	4°B		V	V	V	AC	K7	14mm	.035	Z	15°B		
T46, F46 (1937)	Own 331	6-3½x5	Al	Bot	42-2400	8°A		V	V	V	AC	K7	14mm	.035	Z	15°B		
T46, 400, F46 (1937)	Own 400	6-4½x5	Al	Top	42-	8°A		V	V	V	AC	K7	14mm	.035	Z	15°B		
T81, F81 (1937)	Own 400	6-4½x5	Al	Top	42-	8°A		.008	V	V	AC	K7	14mm	.035	Z	15°B		
T81, F81 (1937)	Opt 450	6-4½x5	Al	Top	42-	8°B		.008	V	V	AC	K7	14mm	.035	Z	15°B		
T81H, F81H (1937)	Own 400	6-4½x5	Al	Top	42-	8°A		.008	V	V	AC	K7	14mm	.035	Z	15°B		
T81H, F81H (1937)	Opt 450	6-4½x5	Al	Top	42-	8°B		.008	V	V	AC	K7	14mm	.035	Z	15°B		
T14, T14B, T15, T155 (1938)	Own 223	6-3½x4½	Al	Top	35-45	5°B		.0125	.012	.012	AC	45	14mm	.035	D	5°B		
T16, T16H, F16, F16H (1938)	Own 230	6-3½x4½	Al	Top	28-35	5°B		.008	.011	.011	AC	45	14mm	.035	D	15°B	TC	
T18, F18, T18H, F18H (1938)	Own 239	6-3½x4½	Al	Top	35-	4°B		.012	V	V	AC	K7	14mm	.035	D	15°B		
T23, T23H, F23, F23H (1938)	Own 257	6-3½x4½	Al	Top	35-	4°B		.012	V	V	AC	K7	14mm	.035	D	15°B		
T33, T33H, F33, F33H (1938)	Own 286	6-3½x4½	Al	Top	35-	4°B		.012	V	V	AC	K7	14mm	.035	D	15°B		
T46, F46 (1938)	Own 331	6-3½x5	Al	Top	42-2400	18°A		.012	V	V	AC	K7	14mm	.035	Z	15°B		
T81, T81H, F81, F81H (1938)	Own 400	6-4½x5	Al	Top	42-45	18°A		.012	V	V	AC	K7	14mm	.035	Z	15°B		
AC100, AC150, AC200, AC250, AC300, AF300, AC350, AC350, AF350 (1939)	Own 228	6-3½x3½	Al	Top	28°B	10½B		.006	.013	.013	AC	44	14mm	.025	D			
AC400, AF400, AC450, AF400 (1939)	Own 248	6-3½x3½	Al	Top	28°B	10½B		.006	.013	.013	AC	44	14mm	.025	D			
AC500, AF500, AC550, AF550 (1939)	Own 278	6-3½x4½	Al	Top	40-1000	5°B		.012	.012	.012	AC	44	14mm	.025	D			
AC600, AF600, AC650, AF650 (1939)	Own 308	6-3½x4½	Al	Top	40-1000	5°B		.012	.012	.012	AC	44	14mm	.025	D			
AC700, AF700 (1939)	Own 361	6-4½x5½	Al	Top	40-1000	5°B		.012	.012	.012	AC	44	14mm	.025	D			
AC800, AF800 (1939)	Own 426	6-4½x5½	Al	Top	40-1000	5°B		.012	.012	.012	AC	44	14mm	.025	D			
AC850, AF850 (1939)	Own 451	6-4½x5½	Al	Top	40-1000	5°B		.012	.012	.012	AC	44	14mm	.025	D			
GRAMM																		
16 (1937-39)	Her QXB	6-3½x4½	CI	Top	26-2600	5°A		.006	.008	.010	Ch	3 COM	7/8	.025	.020		110	
25, 30 (1937-39)	Her JXA	6-3½x4½	CI	Top	26-2600	5°A		.008	.008	.010	Ch	3 COM	7/8	.025	.020		110	
40, 46, 60 (1937-39)	Her JXB	6-3½x4½	CI	Top	26-2600	5°A		.008	.008	.010	Ch	3 COM	7/8	.025	.020		105	
85, 70 (1937-39)	Her JXC	6-3½x4½	Al	Top	26-2600	5°A		.008	.008	.010	Ch	3 COM	7/8	.025	.020		100	
75, 65 (1937-39)	Her JXD	6-4x4½	Al	Top	26-2600	5°A		.008	.008	.010	Ch	3 COM	7/8	.025	.020		107	
DJX66, DJX40, DJX70 (1937-39)	Her DJXB	6-3½x4½	Al	Top	40-2000	12°B		.016	.016	.016	No	No	No	No	No		150	
DJX75, DJX86 (1937-39)	Her DJXC	6-3½x4½	Al	Top	40-2000	12°B		.016	.016	.016	No	No	No	No	No		150	
HUG																		
15	Wau 6BL	6-3½x4½	CI	Top	30-1000	TC	TC	.010	.006-.008	.010-.012	Ch	COM 7	18mm	.025	H	25°B	88	112
18	Wau 6BK	6-3½x4½	CI	Top	30-1000	TC	TC	.010	.006-.008	.010-.012	Ch	COM 7	18mm	.025	H	25°B	88	112
22	Bud H298	6-3½x4½	CI	Top	30-1000	TC	TC	.006	.006H	.006H	Ch	COM 7	18mm	.025	H	27°B	91°B	83
42, 70	Bud K369	6-4½x4½	SS	Top	30-1000	TC	TC	.006	.006H	.006H	Ch	COM 7	18mm	.025	H	27°B	91°B	82
43A, 43T, 87K, 87Q, 43-4, 87K4	Bud K426	6-4½x4½	SS	Top	30-1000	TC	TC	.006	.006H	.006H	Ch	COM 7	18mm	.025	H	27°B	91°B	84
43L, 97L, 97LD, 87Q4	Bud L525	6-4½x5½	SS	Top	30-1000	TC	TC	.006	.006H	.006H	Ch	COM 7	18mm	.025	H	27°B	91°B	83
95	Bud GF6	6-4½x6	CI	Bot	30-1000	5°A	2½A	.010	.010C	.016C	Ch	COM 7	18mm	.025	H	20°B	83°B	72
INDIANA																		
84, 86, 86, 87	Her JXB	6-3½x4½	Al	Top	26-2600	5°A	1½A	.010	.008	.010		COM 1	7/8	.022	E	TC	TC	81
86, 95DR, 95SW75, 95SBT151	Her JXC	6-3½x4½	Al	Top	26-2600	5°A	1½A	.010	.008	.010		COM						

ENGINE SERVICE SPECIFICATIONS—Continued

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °C B-Before A-After	Spark Occurs Fly- Wheel Teeth °C B-Before A-After	Comp. Pressure at Cranking Speed
						°C	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
KENWORTH																		
88, 89, 89SBT, 89SW, 90.	Her JXC	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	26-2600	5"A	TC	.006	.006	.006	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
127.	Her WXC	6-4x4 $\frac{1}{2}$	AI	Top	26-2600	2"A	TC	.010	.006	.010	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
128.	Her WXC2	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	26-2600	2"A	TC	.010	.006	.010	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
148B.	Bud K393	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	26-2600	2"A	TC	.010	.006	.010	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
186.	Her YXC2	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	26-2600	2"A	TC	.010	.006	.010	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
241.	Her RXB	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	26-2600	2"A	TC	.010	.006	.010	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		
313 (1938).	Her JXD	6-4x4 $\frac{1}{2}$	AI	Top	26-2600	5"A	TC	.008	.008	.010			$\frac{3}{8}$	.025	.020	TC		TC
325, 326, 327, 328, 341, 342 (1938).	Bud L825	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	25-1000	10"B	TC	.008	.008	.012			14mm	.025	.020	10"B		
329, 330, 331, 332, 339, 340 (1938).	Bud K428	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	25-1000	TC	TC	.006	.006	.008			18mm	.025	.015	10"B		
333, 334, 335 (1938).	Bud K393	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	SS	Top	25-1000	TC	TC	.006	.006	.008			18mm	.025	.015	10"B		
336, 337, 338 (1938).	Her JXM	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	26-2800	5"A	TC	.006	.006	.006			$\frac{3}{8}$	.025	.020	TC		
LA FRANCE REPUBLIC																		
C3, D4, E4.	Wau 6BK	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	40-	TC	TC	.010	.006-.008	.010-.012	AC	86	18mm	.025				112
F4, H6.	Wau 6MK	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-	8"A	3A	.004	.004-.006	.012-.014	AC	86	18mm	.025				80
K1.	Wau 6SRL	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-	10"A	3A	.004	.006-.008	.016-.018	AC	85	$\frac{3}{8}$	.025				80
M4.	Wau 6-125	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	CI	Top	40-	42"B	15B	.010	.010-.012	.018-.020	AC	78	18mm	.025				96
EH5B, EH5D, EH6B, EH6D	Wau 6BZ	6-4x4 $\frac{1}{2}$	AI	Top	40-1500	5"A	2A	.010	.010-.012	.014-.016	AC	86	18mm	.025				112
FH5B, FH5D, HH7	Wau 6MZR	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	40-1500	8"A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				90
KH2	Wau 6SRLR	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	40-1500	8"A	3A	.004	.006-.010	.016-.018	AC	76	$\frac{3}{8}$	.025				96
MH5	Wau 6SRKR	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	40-1500	8"A	3A	.004	.008-.010	.016-.018	AC	76	$\frac{3}{8}$	.025				96
MACK																		
1M, 10M.	MR 209	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	30-2000	2"B	1 $\frac{1}{2}$ B	.012	.007	.008	Ch	C7	18mm	ZZ	.020	10"B	3B	85
20M.	MR 228	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Bot	40 Max.	5"B	2B	.012	.007	.008	Ch	C7	18mm	ZZ	.020	10"B	4B	85
30M.	MR 268	6-3 $\frac{1}{2}$ x5	AI	Bot	40 Max.	TC	TC	.012	.007	.008	Ch	C7	18mm	ZZ	.020	10"B	4B	78
40M.	MR	6-3 $\frac{1}{2}$ x5	AI	Bot	40 Max.	TC	TC	.012	.007	.008	Ch	C7	18mm	ZZ	.020	10"B	4B	78
60M.	MR	6-3 $\frac{1}{2}$ x5	AI	Bot	40 Max.	TC	TC	.012	.007	.008	Ch	C7	18mm	ZZ	.020	10"B	4B	78
MACK																		
BG-EC, EH, EM-S.R.	Own BG	6-3 $\frac{1}{2}$ x5	TP	Top	50-	8"A	2A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	2 $\frac{1}{2}$ B	89
EE.	Own FO	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	30-40	6 $\frac{1}{2}$ "B	TC	.017	.016	.018	Ch	C7	18mm	ZZ	P	3"B		105
EF.	Own FM	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	30-40	8 $\frac{1}{2}$ "B	TC	.017	.016	.018	Ch	C7	18mm	ZZ	P	3B		105
EJ-S.R.	Own EJ	6-3 $\frac{1}{2}$ x5	AI	Bot	40-	TC	TC	.012	.008	.010	Ch	C7	14mm	ZZ	P			
EQ-D.R.	Own CU	6-3 $\frac{1}{2}$ x5	AI	Top	50-	8"A	2A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	2 $\frac{1}{2}$ B	90
BF-S.R., EB-S.R., BF-D.R., EB-D.R.	Own CU	6-3 $\frac{1}{2}$ x5	AI	Top	50-	8"	2A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	2 $\frac{1}{2}$ B	90
AB Chain, AB-D.R.	Own AB	4-4 $\frac{1}{2}$ x5	TP	Top	35-	10"A	4A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	TC	83
BM, CH.	Own CE	6-4x5 $\frac{1}{2}$	TP	Bot	35-	10"A	4A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	2 $\frac{1}{2}$ B	91
BX Chain, BX-D.R., CJ, BX-2W.D., BX-4W.D., CJ-2W.D., CJ-4W.D.	Own CF	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	35-	10"A	4A	.012	.008	.024	Ch	8	18mm	ZZ	P	7"B	2 $\frac{1}{2}$ B	91
AK6, BQ, BQ-2W.D., BQ-4W.D.	Own BQ	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	TP	Top	50-	10"A	4 $\frac{1}{2}$ A	.012	.008	.024	Ch	2	$\frac{3}{8}$	ZZ	P	2"B	1B	84
AC4, AK4.	Own AC	4-5x6	TP	Top	30-	10"A	4 $\frac{1}{2}$ A	.012	.008	.024	Ch	8	18mm	ZZ	P	TC		65
EG	Own FK	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	30-40	6 $\frac{1}{2}$ "B	TC	.016	.016	.018	Ch	C7	18mm	ZZ	P	7"B	TC	105
MARMON-HERRINGTON																		
A10-4.	Her JXA	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.006	.006	.006	Ch	1 COM	$\frac{3}{8}$	.025	.020	TC		96
A30-4.	Her WXC	6-4x4 $\frac{1}{2}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC		92
A40-4, A50-4.	Her WXC3	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC		92
TH300-4.	Her YXC	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC		91
TH310-4.	Her YXC3	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC		91
TH310A-4, TH310A-6.	Her RXC	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	25-2600	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC		103
TH315-4, TH315-6.	Her HXB	6-5x6	AI	Top	35-1600	5"B	2B	.015	.010	.016	Ch	1 COM	18mm	.025	.020	TC		105
TH320-4, TH320-6.	Her HXC	6-5 $\frac{1}{2}$ x6	AI	Top	35-1600	5"B	2B	.015	.010	.016	Ch	1 COM	18mm	.025	.020	TC		105
B10-4, C10-4.	Her JXB	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.006	.006	.006	Ch	2 COM	$\frac{3}{8}$	.025	.020	TC		96
A20-4, B20-4, C20-4, C20-6.	Her JXC	6-3 $\frac{1}{2}$ x4 $\frac{1}{4}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.006	.006	.006	Ch	2 COM	$\frac{3}{8}$	.025	.020	TC		114
B20-4, C30-4, C30-6.	Her JXD	6-4x4 $\frac{1}{2}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.006	.006	.006	Ch	2 COM	$\frac{3}{8}$	.025	.020	TC		114
B40-4, B40-6, C40-4, C40-6, B50-4.	Her WXC3	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	6 COM	18mm	.025	.020	TC		92
B60-4, C55-4, C55, DR4, C60-4, C60-6.	Her RXB	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	6 COM	18mm	.025	.020	TC		103
B70-4, B70-6, C70-4.	Her RXB	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	6 COM	18mm	.025	.020	TC		103
B80-4, B80-6, C80-4, C80-6.	Her RXC	6-4 $\frac{1}{2}$ x5 $\frac{1}{4}$	AI	Top	25 Max.	2"A	1 $\frac{1}{2}$ A	.010	.006	.010	Ch	6 COM	18mm	.025	.020	TC		103
TH415-4, TH415-6, TH515-4, TH515-6.	Her HXB	6-5x6	AI	Top	25 Max.	5"B	2B	.015	.010	.016	Ch	6 COM	18mm	.025	.020	TC		105
TH420-4, TH420-6.	Her HXD	6-5x6	AI	Top	25 Max.	5"B	2B	.015	.010	.016	Ch	6 COM	18mm	.025	.020	TC		105
B5-4x4, B6-4x4, B5-6x6, B6-6x6, B5-6x4, B6-6x4.	Ford V8	6-3 $\frac{1}{2}$ x3 $\frac{3}{4}$	AI	Top	40 Max.	9 $\frac{1}{2}$ "B	TC	.013	Y	Y	Ch	7 COM	18mm	.025	.014	TC		95
M20-4, TH520-6.	Her HXE	6-5 $\frac{1}{2}$ x6	AI	Top	25 Max.	5"B	2B	.015	.010	.016	Ch	8 COM	18mm	.025	.020	TC		105
LD1 (1937), CSA-4, CSB4, C5-4, C6-4 (1937), C5-6, C6-6 (1937).	Ford V8	6-3 $\frac{1}{2}$ x3 $\frac{3}{4}$	St	Top	40 Max.	TC	TC	.013	Y	Y	Ch	8 COM	14mm	.025	YY	4"B		100
LD2-4, E5-4, E5-6, E6-4, E6-6 (1938).	Ford V8	6-3 $\frac{1}{2}$ x3 $\frac{3}{4}$	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	8 COM	14mm	.025	YY	4"B		100
LD3-4, F5-4, F6-4, F5-6, F6-6, OT2-4 (1939).	Ford 85	6-3 $\frac{1}{2}$ x3 $\frac{3}{4}$	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	8 COM	14mm	.025	YY	4"B		100
FF5-4, FF6-4, FF5-6, FF6-6, OOT2-4 (1939).	Ford 95	6-3 $\frac{1}{2}$ x3 $\frac{3}{4}$	CA	Top	30-2000	TC	TC	.013	Y	Y	Ch	8 COM	14mm	.025	YY	4"B		100
OSHKOSH																		
WLX.	Her WXC2	6-4 $\frac{1}{2}$ x4 $\frac{1}{4$																

ENGINE SERVICE SPECIFICATIONS—Continued

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs T-C B-Before A-After	Spark Occurs Fly- Wheel Teeth T-C B-Before A-After	Comp. Pressure at Cranking Speed																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
						TC	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
184H, 1D4H (1938) 2B4, 2D4, 2T5, 2H5, 2L4, 2L7M (1938) 2L4H, 2L7MH, 3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5 (1938) 4H5, 4J5, 4K5, 4L6H (1938)	Own S3L Own S3 Own S5 Bud K428	6-3 1/2 x 5 6-3 1/2 x 5 6-3 1/2 x 5 6-4 1/2 x 4 1/2	Al Al Al CI	Top Top Top Bot	40- 40- 40- 30-	18" A TC TC TC			.008 .008 .008 .008	.010 .010 .010 .008	Ch Ch Ch Ch	J6 J6 J6 C7	14mm 14mm 14mm 18mm	.025 .025 .025 .025	.020 .020 .020 .020	6" B 8" B 8" B 10" B	3 1/2 B 3 1/2 B 3 1/2 B 1B	60 60 60 70																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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FB50 Del, FB60 Del, FB70 Del, FC90, FB70, FBT130... FB-80, FD90 FC100, FD97 FDS180, FC135, FD115 FBT152 FBT152 HC185, HC200, HC250, HC170, HCS210 MB75, MD75, MS75, MD85, MB85 (1939) MB90, MD90 (1939) JB90, JD90, HD105, HC105, HBT128, HWS128, HDS128 (1939) HD110, HD115, HC115 JAD135, JD137, HD145, HD165, JC137, JC145, HC145, HC147, HC156, HC165, HC175, JDS160, JWS160, HWS235S, HDS235S, HCS225 (1939) HC185, HC200, HC250, HC255, HCS285, HCS300 (1939)	Wau 6BK Wau 6MK Wau 6SRL Wau 6-125 Wau 6MZ Wau 6-110 Wau 6RB Wau 6BZ Wau 6MKR Wau 6MZR Wau 6SRLR Wau 6SRKR Wau 6BRB	6-3 1/2 x 4 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 5 1/2 6-4 1/2 x 5 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 4 1/2 6-5 1/2 x 4 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 5 1/2 6-4 1/2 x 5 1/2 6-4 1/2 x 4 1/2 6-4 1/2 x 5 1/2 6-5 1/2 x 4 1/2	Al Al Al CI Al Al CI Al Al Al Al Al Al Al Al Al	Top Top Top Top Top Top Top Top Top Top Top Top Top Top Top Top	40-1500 40-1500 40-1500 40- 40- 40- 40- 40-1500 40-1500 40-1500 40-1500 40-1500 40-1500 40-1500 40-1500 40-1500	TC 8" A 10" A 42" B 8" A 15" B 10" A 5" A 8" A 8" A 8" A 10" A 10" A 8" A 10" A 8" A	TC 3A 3A 15B 3A 5B 4A 2A 3A 3A 3A 3A 3A 3A 3A 4A	.010 .004 .004 .010 .004 .010 .008 .010 .004 .004 .004 .004 .004 .004 .004 .004	.010-.012 .008-.010 .008-.008 .010-.012 .008-.010 .010-.012 .008-.008 .010-.012 .008-.010 .008-.010 .008-.010 .008-.010 .008-.010 .008-.010 .008-.010 .008-.010	.014-.016 .014-.016 .018-.018 .018-.020 .014-.016 .014-.016 .014-.016 .014-.016 .016-.018 .016-.018 .016-.018 .016-.018 .016-.018 .016-.018 .016-.018 .016-.018	AC AC AC AC AC AC AC AC AC AC AC AC AC AC AC AC AC	86 88 76 85 86 D8 78 88 88 86 86 76 76 76 76 76	18mm 18mm 3/4 18mm 18mm 18mm 3/4 18mm 18mm 18mm 3/4 18mm 18mm 18mm 18mm 18mm	.025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025 .025																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

ENGINE SERVICE SPECIFICATIONS—Continued

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC B-Before A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressure at Cranking Speed
						°TC	Flywheel Teeth/TC		Intake	Exhaust	Make	Type	Size	Gap				
CONTINENTAL	L525	6-4½x5½	Top		TC	TC	.006	.006	.009			18mm	.025				87	
	LO525	6-4½x5½	Top				.009	.009	.018			18mm	.025				94	
	7F638	6-4½x6	Top				.010	.010	.016			18mm	.025				87	
	7M766	6-5x6½	Top				.010	.010	.016			18mm	.025				94	
	C400	4-3½x4	Tp	Top	35-2500		.012	.010C	.010C			18mm					100	
	F6170	6-3x4	Tp	Top	30-2000		.014	.014C	.014C			18mm						
	F6199	6-3½x4	Tp	Top	30-2000		.014	.014C	.014C			18mm						
	F6209	6-3½x4½	Tp	Top	30-2000		.014	.014C	.014C			18mm					85	
	F6218	6-3½x4½	Tp	Top	30-2000		.014	.014C	.014C			18mm					97	
	A6244	6-3½x4½	Al	Top	50-2500		.014	.014C	.014C			18mm					114	
	20C	6-3½x4½	Al	Top	35 Max.		.012	.008H	.010H			7/8					83	
	E600	6-3½x4½	Tp	Top	40-2600		.018	.018C	.018C			18mm					102	
	E601	6-3½x4½	Cl	Top	40-2600		.018	.018C	.018C			18mm					97	
	E602	6-4½x4½	Cl	Top	40-2600		.018	.018C	.018C			18mm					102	
	E603	6-4½x4½	Cl	Top	40-2600		.018	.018C	.018C			18mm					98	
	20R	6-4½x4½	Al	Top	30-2300		.014	.013C	.018C			18mm					80	
	HERCULES	21R	6-4½x4½	Al	Top	30-2300		.014	.013C	.018C			18mm					76
22R		6-4½x5½	Al	Top	30-2300		.014	.013C	.018C			18mm					78	
Y4069		4-2½x3½	Cl	Top	35-40		.012	.012C	.012C			14mm					105	
Y4091		4-2½x3½	Cl	Top	35-40		.012	.012C	.012C			14mm					105	
F4124		4-3x4½	Tp	Top	35-40		.014	.014C	.014C			18mm					105	
F4140		4-3½x4½	Tp	Top	35-40		.014	.014C	.014C			18mm					105	
F4162		4-3½x4½	Tp	Top	35-40		.014	.014C	.014C			18mm					105	
M6271		6-3½x4½	Tp	Top	35-1200		.0175	.018C	.018C			18mm					99	
M6290		6-3½x4½	Tp	Top	35-1200		.0175	.018C	.018C			18mm					101	
M6330		6-4x4½	Tp	Top	35-1200		.0175	.018C	.018C			18mm						
JXA		6-3½x4½	Var	Top	26-2600 5"A	Var	.008	.008	.010			7/8	.025	.020	TC	TC	Opt	
JXB		6-3½x4½	Var	Top	26-2600 5"A	Var	.008	.008	.010			7/8	.025	.020	TC	TC	Opt	
JXC		6-3½x4½	Var	Top	26-2600 5"A	Var	.008	.008	.010			7/8	.025	.020	TC	TC	Opt	
JXD		6-4x4½	Var	Top	26-2600 5"A	Var	.008	.008	.010			7/8	.025	.020	TC	TC	Opt	
WXC		6-4x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt	
WXC2		6-4½x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt	
WXC3		6-4½x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt	
YXC	6-4½x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
YXC2	6-4½x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
YXC3	6-4½x4½	Var	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
RXB	6-4½x5½	Al	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
RXC	6-4½x5½	Al	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
HXB	6-5x6	Al	Top	35-1800 5"B	Var	.010	.010	.016			7/8	.025	.020	TC	TC	Opt		
HXC	6-5½x6	Al	Top	35-1800 5"B	Var	.010	.010	.016			7/8	.025	.020	TC	TC	Opt		
HXD	6-5½x6	Al	Top	35-1800 5"B	Var	.010	.010	.016			7/8	.025	.020	TC	TC	Opt		
HXE	6-5½x6	Var	Top	35-1800 5"B	Var	.010	.010	.016			7/8	.025	.020	TC	TC	Opt		
OXA	6-3½x4½	Var	Top	26-2600 5"B	Var	.006	.006	.008			7/8	.025	.020	TC	TC	Opt		
OXB	6-3½x4½	Var	Top	26-2600 5"B	Var	.006	.006	.008			7/8	.025	.020	TC	TC	Opt		
OXC	6-3½x4½	Var	Top	26-2600 5"B	Var	.006	.006	.008			7/8	.025	.025	TC	TC	Opt		
IXA	4-3x4	Var	Top	15-1000 5"A	Var	.006	.006	.008			7/8	.025	.020	TC	TC	Opt		
IXB	4-3½x4½	Var	Top	15-1000 5"A	Var	.006	.006	.008			7/8	.025	.020	TC	TC	Opt		
IOA	4-3½x4½	Var	Top	16-1000 5"A	Var	.008	.008	.012			7/8	.025	.020	TC	TC	Opt		
IOB	4-3½x4½	Var	Top	16-1100 5"A	Var	.008	.008	.012			7/8	.025	.020	TC	TC	Opt		
IOC	4-4x4½	Var	Top	16-1000 5"A	Var	.008	.008	.012			7/8	.025	.020	TC	TC	Opt		
RXLC	6-4½x5½	Var	Top	26-2300 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
RXLD	6-4½x5½	Var	Top	26-2300 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
WXLC	6-4x4½	Al	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
WXLC3	6-4½x4½	Al	Top	26-2600 2"A	Var	.006	.006	.010			7/8	.025	.020	TC	TC	Opt		
LYCOMING	(1933)	SC	6-3½x4½	Cl	Bot	40 Max. 5"A	1½A	.010	.008-.008	.010-.012			7/8	.025	.018			
	(1929-34)	TS	6-3½x5	Cl	Top	40 Max. 5"A	1½A	.010	.006-.008	.010-.012			7/8	.025	.018			
	(1933) on	AEF	6-3½x4½	Al	Top	40 Max. 5"B	1½B	.012	.008-.010	.010-.012			18mm	.025	.018			
	(1930-33)	ASB	6-3½x4½	Cl	Top	40 Max. 5"A	1½A	.012	.008-.010	.010-.012			18mm	.025	.018			
	(1930-33)	ASD	6-3½x4½	Cl	Top	40 Max. 5"A	1½A	.012	.008-.010	.010-.012			18mm	.025	.018			
	(1934) on	ASE	6-3½x4½	Al	Bot	40 Max. 5"A	1½A	.012	.008-.010	.010-.012			18mm	.025	.018			
	(1930) on	AFE	4-3½x4½	Cl	Bot	40 Max. 7½B	2½B	.008	.006-.008	.006-.008			7/8	.025	.018			
	(1924) on	GF	6-3½x4½	Al	Bot	40 Max. 7½B	2½B	.012	.008-.010	.008-.010			18mm	.025	.018			
	(1934) on	WFC	6-3½x4½	Al	Bot	40 Max. 7½B	2½B	.012	.008-.010	.008-.010			14mm	.025	.018			
	(1938) on	DC	4-3½x3½	Al	Bot	35 Max. 7"B	2½B	.012	.010-.012	.010-.012			18mm	.025	.018			
	WAUKESHA	6BK	6-3½x4½	Cl	Top	40-1500 TC	TC	.010	.010-.012	.014-.016			18mm	.025	.018			112
6MS		6-3½x4½	Cl	Top	40-1500 8"A	5A	.004	.008-.010	.012-.014			18mm	.025	.018			86	
6ML		6-4x4½	Cl	Top	40-1500 8"A	3A	.004	.008-.010	.014-.016			18mm	.025	.018			89	
6MK		6-4½x4½	Cl	Top	40-1500 8"A	3A	.004	.008-.010	.014-.016			18mm	.025	.018			80	
6MZ		6-4½x4½	Cl	Top	40-1500 8"A	3A	.004	.008-.010	.014-.016			18mm	.025	.018			90	
6SRL		6-4½x5½	Cl	Top	40-1500 10"A	3A	.004	.008-.010	.016-.018			7/8	.025	.019			90	
6SRK		6-4½x5½	Var	Top	40-1500 10"A	3A	.004	.008-.010	.016-.018			7/8	.025	.018			90	
6AB		6-4½x5½	Cl	Top	40-1500 10"A	3A	.008	.004-.006	.008-.010			7/8	.025	.018			76	
6RB		6-5x5½	Al	Top	40-1500 10"A	4A	.008	.006-.008	.010-.012			7/8	.025	.018			90	
6BL		6-3½x4½	Al	Top	40-1500 TC	TC	.010	.010-.012	.014-.016			18mm	.025	.018			112	
6-90		6-3½x4½	Al	Top	40-1500 5"B	5B	.010	.010-.012	.014-.016			18mm	.025	.018			88	
6-110		6-4x4½	Al	Top	40-1500 15"B	5B	.039	.010-.012	.014-.016			18mm	.025	.018			97	
6-125		6-4½x5½	Al	Top	40-1500 42"B	15B	.008	.010-.012	.018-.020			18mm	.025	.018			96	
6SRS		6-4½x5½	Cl	Top	40-1500 10"A	TC	.004	.008-.010	.016-.018			7/8	.025	.018			80	
6BA		6-3½x4½	Cl	Top	40-1500 TC	TC	.010	.010-.012	.012-.014			18mm	.025	.018			112	
6BM		6-3½x4½	Cl	Top	40-1500 TC	TC	.010	.010-.012	.014-.016			18mm	.025	.018			111	
6ZKA		6-3½x4½	Cl	Top	40-1500 TC	TC	.004	.008-.010	.012-.014			18mm	.025	.018			112	
6GAL		6-5x5½																

LUBRICATION

SPECIFICATIONS BY TRUCK MAKE AND MODEL

ABBREVIATIONS

- Fibre Grease for pin and bushing type, 160 for needle bearing type
- Use 110EP below 30°
- Use 40 for high speed above 80°
- Use 90EP with dual performance axles
- Double reduction and 2-speed axles 110EP
- Use 40 for high speed above 90°
- Fibre Grease for pin and bushing type, 160 for needle bearing type
- Use 110EP below 30°
- Use 40 for high speed above 80°
- Use 90EP with dual performance axles
- Double reduction and 2-speed axles 110EP
- Use 40 for high speed above 90°

- FG Fibre Grease
- H Heavy duty
- Kero Kerosene
- M Mild
- N Normal duty
- (S) Summer
- SS Sodium soap
- (W) Winter

TRUCK MAKE AND MODEL	ENGINE		TRANSMISSION		REAR AXLE		STEERING GEAR		UNI-VERSAL JOINT
	Viscosity and Temperature Range		Summer	Winter	Summer	Winter	Summer	Winter	
AUTOCAR—All Models (1935-39)	(S) 40	(W) 30	160	110	160	110	160	110	160
BANTAM 60	(S) 30	(W) 20	160	90	160	90			None
BROCKWAY—V1200 (1934-35)	N40 above 32°	H40 above 32°	160	110	160	110	160	110	160
76, 83, 86, 92, 94 (1935-36)	N30 above 32°	H40 above 32°	160	110	160	110	160	110	160
87, 88, 89, 110, 112, 125X, 128, 130, 145, 150X4, 160X, 165X, 170X, 175X, 180XSBT, 180XSBT Spec., 195X, 220X, 240X, 260X (1934-39)	N40 above 32°	H40 or 50 above 32°	160	110	160	110	160	110	160
CHEVROLET—All Models (1935)	20 above 78°	10W@-15°-32°	160	90†	160	90†	160	90†	160-90†
All Models (1936)	20W@32°-75°	20W@10°-80°	160	90†	160	90†	160	90†	160-90†
All Models (1937-39)	30 above 50°	10W@10°-45°	160	90†	160	90†	160	90†	160-90†
20@30°-60°	20W@10°-30°	20W@10°-45°	90	90†	90	90	90	90	90
20@50°-90°	10W@-10°-10°	10W@-10°-10°	110	90	160	110	160	160	160
CORBITT—All Models (1934-38)	(S) 40	(W) 30	160	110	160	110	160	110	160
DIAMOND—T-211, 211A, 220, 226, 227, 242, 243, 262, 311B, 311C, 312, 351B, 351C, 3 52, 411B, 412B, 511B, 512B (1934-35)	40 above 40°	30 below 40°	160	90	160	90	160	90	160
311DR, 351DR, 411DR, 412DR, 511DR, 512DR (1935-36)	40 above 40°	30 below 40°	160	90	160	90	160	90	160
228, 412B, 512B, 80, 212A, 212B, 221, 244, 313, 320, 353, 360 (1935-37)	40 above 40°	30 below 40°	160	90	160	90	160	90	160
412DR, 512DR (1936-37)	40 above 40°	30 below 40°	160	90	160	90	160	90	160
All Models (1938-39)	40 above 40°	30 below 40°	160	90	160	90	160	90	160
DODGE—LC (1935-36)	40 above 100°	20W@0°-32°	160	90	160	90	160	90	160
LE Series, LF Series, LG Series, LH Series, K60V Series	30@32°-100°	10W@15°-0	160EP	90EP	160EP	90EP	160EP	90EP	160EP
M Series, R Series (1937-38)	50 above 100°	20W@0°-32°	160EP	90EP	160EP	90EP	160EP	90EP	160EP
FEDERAL—15, 18, 20, 25, T10B, T10W (1935)	40@32°-100°	10W@15°-0	160	90	160	90	160	90	160
28, 29, 30, 40, 40DR, 50, C7, C8, X8, X8R (1935)	40@32°-100°	20W@0°-32°	160	90	160	90	160	90	160
9 (1936)	40@32°-100°	10W@15°-0	160	90	160	90	160	90	160
10, 11, 15, 18, 20, 25, 28, 78, 80, 88, 11K, 12K, 14K, 15K, 16K, 20K, 25K, 29K, 75K, 80K, 85K, 89K	40@32°-100°	20W@0°-32°	160	90	160	90	160	90	160
C7, C8, 40, 50, 40F, 50F, 62, 63, 65, 66	40@32°-100°	10W@15°-0	160	90	160	90	160	90	160
FORD—All (1932-38)	40 above 90°	30@20°-65°	160	90 or 110	160EP	90EP or 110EP	160	90 or 110	160
All (1939)	40@30°-110°	30 above 32°	140	90	90EP(M)	90EP(M)	90	90	160
FWD—HS, T28 (1934-38)	(S) 40	(W) 20W	160	90	160EP	90EP	160EP	90EP	160EP
H6, H16, CUB, CUBA, SSU, SSUA, M5, M16, LBU, M06, 60T, 72T (1934-35)	(S) 50	(W) 30	160	90	160EP	90EP	160EP	90EP	160EP
M7 (1934-35)	(S) 60	(W) 30	160	90	160EP	90EP	160EP	90EP	160EP
All Models (1936-39)	(S) 50	(W) 30	160	90	160EP	90EP	160EP	90EP	160EP

[illegible]



GASOLINE Engine

MAKE AND MODEL	Number of Cylinders Bore and Stroke (In.)	Rated Hp. (A.M.A.)	Maximum Brake Hp. at Specified R.P.M.	Piston Displacement (Cu. In.)	Compression Ratio	Maximum Torque at R.P.M. (Lb. Ft.)	Arrangement	VALVES				Seat Angle (Degrees)	Front End Drive—Type	Piston Material	Number of Rings per Piston	Crankpin Diameter and Length (In.)	Oil Pressure To	CARBU-RETOR			
								Exhaust Head Material or S.A.E. No.	Max. Head Diameter (In.)		Stem Diameter (In.)							Make	Size	Weight (Without Carburetor or Ignition)—Lb.	
									Intake	Exhaust	Intake										Exhaust
AUTOCAR																					
315	6 3 1/2 x 4 1/2	33.7	81-2400	315.0	5.50	220-800	L	SiI	1.75	1.65	.437	.437	45	HG	Ala	4	2.25x1.44	abcedf	Str	1 1/2	1155
358	6 4 x 4 1/2	38.4	89-2400	358.0	5.50	240-900	L	SiI	1.90	1.78	.437	.437	45	HG	Ala	4	2.25x1.44	abcedf	Str	1 1/2	1166
408	6 4 1/2 x 5 1/2	39.6	110-2400	408.0	5.50	233-900	L	SiI	2.06	1.93	.437	.437	45	HG	Ala	4	2.50x1.58	abcedf	Str	1 1/2	1355
447	6 4 1/2 x 5 1/2	43.4	116-2400	447.0	5.50	331-800	L	SiI	2.06	1.93	.437	.437	45	HG	Ala	4	2.50x1.58	abcedf	Str	1 1/2	1355
501	6 4 1/2 x 5 1/2	48.6	124-2300	501.0	5.50	380-800	L	SiI	2.06	2.06	.437	.437	45	HG	Ala	4	2.50x1.58	abcedf	Str	1 1/2	1350
BUDA																					
HP-205	4 3 1/2 x 4 1/2	23.2	51-2400	205.0	4.76	132-1200	L	2112	1.65	1.53	.372	.372	45	HG	SS	4	2.12x1.62	abcedf	Zen	1 1/2	590
HP-217	4 3 1/2 x 4 1/2	23.2	54-2400	217.0	5.00	146-1200	L	2112	1.65	1.53	.372	.372	45	HG	CI	4	2.12x1.62	abcedf	Zen	1 1/2	590
YT-381	4 4 1/2 x 6	32.4	90-1400	381.7	4.10	222-850	L	2112	2.37	2.37	.434	.434	45	HG	CI	4	2.25x3.09	abcedf	Zen	1 1/2	1087
YR-425	4 4 1/2 x 6	36.0	57-1400	425.3	3.80	264-700	L	2112	2.37	2.37	.434	.434	45	HG	CI	4	2.50x2.87	abcedf	Zen	1 1/2	1097
BTU	4 5 x 6 1/2	40.0	61-1200	510.5	4.65	330-650	L	2112	2.50	2.50	.434	.434	45	HG	CI	4	2.50x3.12	abcedf	Zen	1 1/2	1409
FR	4 5 1/2 x 6 1/2	49.5	78-1200	618.0	4.60	405-650	L	2112	2.50	2.50	.434	.434	45	HG	CI	4	2.50x3.12	abcedf	Zen	1 1/2	1430
HP-260	6 3 1/2 x 4 1/2	29.4	88-2800	260.0	4.75	185-1200	L	2112	1.65	1.53	.372	.372	45	HG	CI	4	2.12x1.62	abcedf	Zen	1 1/2	825
HP-298	6 3 1/2 x 4 1/2	33.7	77-2800	298.0	4.75	190-1100	L	2112	1.65	1.53	.372	.372	45	HG	CI	4	2.12x1.62	abcedf	Zen	1 1/2	825
HP-326	6 3 1/2 x 4 1/2	34.8	78-2400	326.0	5.35	218-1000	L	2112	1.65	1.53	.372	.372	45	HG	AI	4	2.12x1.62	abcedf	Zen	1 1/2	885
K-369	6 4 1/2 x 4 1/2	39.6	99-2800	369.0	4.73	234-1100	L	2112	1.90	1.78	.372	.372	45	HG	CI	4	2.37x1.75	abcedf	Zen	1 1/2	900
K-393	6 4 1/2 x 4 1/2	42.0	101-2400	393.0	4.80	260-1200	L	2112	1.90	1.78	.372	.372	45	HG	CI	4	2.37x1.75	abcedf	Zen	1 1/2	905
K-428	6 4 1/2 x 4 1/2	45.9	107-2400	428.0	5.33	302-1000	L	2112	1.90	1.78	.372	.372	45	HG	AI	4	2.37x1.75	abcedf	Zen	1 1/2	905
L-525	6 4 1/2 x 5 1/2	48.6	110-2400	525.0	4.75	340-800	L	2112	1.90	1.78	.372	.372	45	HG	CI	4	2.37x1.75	abcedf	Zen	1 1/2	950
LO-525	6 4 1/2 x 5 1/2	48.6	135-2400	525.0	5.00	334-1100	I	2112	1.96	1.68	.372	.372	30	HG	AI	5	2.37x1.75	abcedf	Zen	1 1/2	1195
GF-638	6 4 1/2 x 6	54.1	134-2000	638.0	4.75	405-1000	L	2112	2.50	2.37	.434	.434	30	HG	CI	4	3.00x2.25	abcedf	Zen	1 1/2	1525
M-766	6 5 x 6 1/2	60.0	155-1800	765.8	5.00	500-1000	I	2112	2.39	2.14	.435	.435	30	HG	AI	5	3.24x2.12	abcedf	Zen	1 1/2	2150
CHEVROLET																					
1939	6 3 1/2 x 3 1/2	29.4	78-3200	216.5	6.25	170-(k)	I	Ext	1.64	1.46	.343	.343	30	HG	CT	3	2.31x1.12	acg*	Car	1 1/2	529
CONTINENTAL																					
Y-4091	4 2 1/2 x 3 1/2	13.2	38-3300	90.9	6.00	66-1300	L	XCR	1.20	1.01	.314	.312	(h)	HG	CT	3	1.50x1.18	abcedf		1 1/2	310
F-4124	4 3 x 4 1/2	14.4	47.5-3300	123.7	6.00	94-1800	L	XCR	1.51	1.32	.341	.339	(h)	HG	CT	4	1.93x1.31	abcedf		1 1/2	400
F-4140	4 3 1/2 x 4 1/2	16.3	52-3250	139.6	6.00	106-1800	L	XCR	1.51	1.32	.341	.339	(h)	HG	CT	4	1.93x1.31	abcedf		1 1/2	405
F-4162	4 3 1/2 x 4 1/2	18.9	58.5-3300	162.4	5.76	122-1800	L	XCR	1.51	1.32	.341	.339	(h)	HG	CT	4	1.93x1.31	abcedf		1 1/2	410
OS-6202	6 3 1/2 x 4 1/2	23.4	70-3200	201.3	6.46	152-1200	I	SiI	1.51	1.21	.373	.371	(h)	HG	CI	4	1.93x1.31	abg		1 1/2	481
F-6170	6 3 x 4	21.6	65-3500	169.6	6.60	124-1200	L	XCR	1.51	1.32	.341	.339	(h)	Ch	CT	4	1.93x1.31	abcedf		1 1/2	481
F-6199	6 3 1/2 x 4	25.4	68.5-3400	199.1	6.00	150-1200	L	XCR	1.51	1.32	.341	.339	(h)	Ch	CT	4	1.93x1.31	abcedf		1 1/2	491
F-6209	6 3 1/2 x 4 1/2	24.4	71-3100	209.5	5.75	154-1200	L	XCR	1.51	1.32	.341	.339	(h)	Ch	CT	4	1.93x1.31	abcedf		1 1/2	506
F-6218	6 3 1/2 x 4 1/2	25.4	73.5-3100	217.8		161-1250	L	XCR	1.51	1.32	.341	.339	(h)	Ch	CT	4	1.93x1.31	abcedf		1 1/2	512
A-6244	6 3 1/2 x 4 1/2	28.3	83.5-3000	243.9	5.40	178-1200	L	XCR	1.57	1.42	.339	.338	(h)	Ch	AI	4	2.12x1.37	abce		1 1/2	567
M-6271	6 3 1/2 x 4 1/2	31.5	85-2800	270.9	5.70	190-1200	L	XCR	1.76	1.51	.404	.402	(h)	HG	CT	4	2.25x1.56	abcedf		1 1/2	750
M-6290	6 3 1/2 x 4 1/2	33.7	88-2750	289.9	5.70	205-1200	L	XCR	1.76	1.51	.404	.402	(h)	HG	CT	4	2.25x1.56	abcedf		1 1/2	760
M-6330	6 4 x 4 1/2	38.4	98.5-2750	329.9	5.50	233-1200	L	XCR	1.76	1.51	.404	.402	(h)	HG	CT	4	2.25x1.56	abcedf		1 1/2	770
E-600	6 3 1/2 x 4 1/2	32.6	78-2650	288.3	5.43	192-900	L	XCR	2.06	1.87	.434	.432	30	HG	CT	4	2.37x1.81	abcedf		1 1/2	925
E-601	6 3 1/2 x 4 1/2	36.0	86-2600	318.4	5.48	214-900	L	XCR	2.06	1.87	.434	.432	30	HG	CT	4	2.37x1.81	abcedf		1 1/2	932
E-602	6 4 1/2 x 4 1/2	40.8	95.5-2550	360.8	5.40	252-900	L	XCR	2.06	1.87	.434	.432	30	HG	CT	4	2.37x1.81	abcedf		1 1/2	938
E-603	6 4 1/2 x 4 1/2	43.3	98-2400	383.0	5.29	265-1000	L	AUS	2.06	1.87	.434	.432	30	HG	CT	4	2.37x1.81	abcedf		1 1/2	951
20R	6 4 1/2 x 4 1/2	40.8	106-2600	380.9	4.75	276-1200	I	AUS	2.05	1.87	.434	.433	30	Ch	AI	4	2.50x1.81	abcedf		1 1/2	1298
21R	6 4 1/2 x 4 1/2	45.9	118-2550	428.4	4.63	308-1200	I	AUS	2.06	1.87	.434	.433	30	Ch	AI	4	2.50x1.81	abcedf		1 1/2	1318
22R	6 4 1/2 x 5 1/2	48.6	138-2400	501.0	4.50	364-1200	I	AUS	2.06	1.87	.434	.433	30	Ch	AI	4	2.75x1.81	abcedf		1 1/2	1430
DODGE																					
TD	6 3 1/2 x 4 1/2	25.3	77-3000	217.7	6.50	158-1200	L	SiI	1.46	1.46	.340	.340	45	Ch	Ala	4	2.06x1.00	abce	Str	1 1/2	546
TE	6 3 1/2 x 4 1/2	27.3	73-3000	218.0	5.80	150-1200	L	SiI	1.65	1.53	.340	.340	45	Ch	AI	4	2.12x1.21	abce	Car	1 1/2	597
TF	6 3 1/2 x 4 1/2	27.3	78-3000	228.1	5.80	159-1200	L	SiI	1.65	1.53	.340	.340	45	Ch	AI	4	2.12x1.21	abce	Car	1 1/2	597
TG-TH	6 3 1/2 x 4 1/2	27.3	85-3000	241.5	5.60	175-1200	L	Tun	1.65	1.53	.340	.340	45	Ch	AI	4	2.12x1.21	abce	Car	1 1/2	612
TL-TK	6 3 1/2 x 5	33.7	100-2800	331.3	5.20	230-800	L	Tun	1.93	1.75	.371	.371	45	Ch	Ala	4	2.31x1.43	abce	Str	1 1/2	1062
FORD																					
60HP	8 2.60x3.20	21.6	60-3500	136.0	6.60	94-2500	L	CNS	1.22	1.28	.279										

SPECIFICATIONS



MAKE AND MODEL	Number of Cylinders Bore and Stroke (In.)	Rated Hp. (A.M.A.)	Maximum Brake Hp. at Specified R.P.M.	Piston Displacement (Cu. In.)	Compression Ratio	Maximum Torque at R.P.M. (Lb. Ft.)	VALVES								Front End Drive—Type	Piston Material	Number of Rings per Piston	Crankpin Diameter and Length (In.)	Oil Pressure To	CARBU- RETOR		Weight (Without Carburetor or Ignition)—Lb.
							Arrangement	Exhaust Head Material or S.A.E. No.	Max. Head Diameter (In.)		Stem Diameter (In.)		Seat Angle (Degrees)									
									Intake	Exhaust	Intake	Exhaust										
HERCULES—Continued																						
E	4 5x5 1/2	40.0	74 1600	451.4	4.00	268 1000	L	Sil	2.25	2.25	.434	.434	45	H ₂	CI	5	2.50x2.62	abce	Op	Op	890	
OXA	6 3 1/2 x 4 1/2	23.4	59 3000	190.0	5.50	130 1000	L	Sil	1.48	1.35	.310	.310	30	H ₂	CI	4	1.98x1.02	abce	Op	Op	499	
OXB	6 3 1/2 x 4 1/2	25.3	65.5 3500	205.0	5.85	143 1000	L	Sil	1.48	1.39	.312	.312	30	HG	CI	4	2.00x1.25	abce	Op	Op	480	
OXC	6 3 3/4 x 4 1/2	27.3	70.5 3500	221.0	5.85	154 1000	L	Sil	1.60	1.39	.312	.312	30	HG	AI	4	2.00x1.25	abce	Op	Op	480	
JXA	6 3 3/4 x 4 1/2	27.3	63 2800	228.0	5.16	141 1000	L	Sil	1.75	1.62	.373	.373	45	HG	CI	4	2.00x1.50	abce	Op	Op	550	
JXB	6 3 3/4 x 4 1/2	31.5	68 2800	263.0	4.50	163 1000	L	Sil	1.75	1.62	.373	.373	45	HG	CI	4	2.00x1.50	abce	Op	Op	560	
JXC	6 3 3/4 x 4 1/2	33.7	73 2800	282.0	5.35	175 1000	L	Sil	1.75	1.62	.373	.373	45	HG	CI	4	2.00x1.50	abce	Op	Op	585	
JXD	6 4x4 1/2	38.4	84 2800	320.0	5.63	204 1000	L	Sil	1.75	1.62	.373	.373	45	HG	AI	5	2.00x1.50	abce	Op	Op	570	
WXC	6 4x4 1/2	38.4	90 2400	239.0	5.00	212 1000	L	Sil	1.75	1.75	.373	.373	45	HG	CI	5	2.25x1.50	abce	Op	Op	835	
WXC-2	6 4 1/2 x 4 1/2	40.8	95 2400	360.8	5.00	233 1000	L	Sil	1.75	1.75	.373	.373	45	HG	CI	5	2.25x1.50	abce	Op	Op	810	
WXC-3	6 4 1/2 x 4 1/2	43.3	101 2400	383.0	5.00	262 1000	L	Sil	1.75	1.75	.373	.373	45	HG	CI	5	2.25x1.50	abce	Op	Op	820	
YXC	6 4 1/2 x 4 1/2	45.9	94 2200	428.4	4.40	281 800	L	Sil	2.00	2.00	.373	.373	45	HG	CI	5	2.50x1.75	abce	Op	Op	975	
YXC-2	6 4 1/2 x 4 1/2	48.6	98 2200	543.0	4.77	300 800	L	Sil	2.00	2.00	.373	.373	45	H ₂	CI	5	2.50x1.75	abce	Op	Op	975	
YXC-3	6 4 1/2 x 4 1/2	51.3	104 2200	478.8	4.40	320 800	L	Sil	2.00	2.00	.373	.373	45	HG	CI	5	2.50x1.75	abce	Op	Op	975	
RXL	6 4 1/2 x 5 1/2	51.3	135 2200	529.2	5.40	388 1000	L	Sil	2.00	2.00	.375	.375	45	H ₂	AI	4	3.00x2.00	abce	Op	Op	1000	
RXR	6 4 1/2 x 5 1/2	48.6	110 2200	500.9	4.95	330 1000	L	Sil	2.00	2.00	.373	.373	45	HG	AI	5	2.62x2.00	abce	Op	Op	1010	
RXC	6 4 1/2 x 5 1/2	51.3	114 2200	529.2	4.95	350 1000	L	Sil	2.00	2.00	.373	.373	45	HG	AI	5	2.62x2.00	abce	Op	Op	1010	
RXL	6 4 1/2 x 5 1/2	54.2	142 2200	558.2	5.40	407 1000	L	Sil	2.00	2.00	.375	.375	45	H ₂	AI	4	3.00x2.00	abce	Op	Op	1810	
HXB	6 5 1/2 x 6	60.0	148 2000	707.0	4.50	455 1000	L	Sil	2.44	2.31	.498	.498	30	HG	AI	4	3.00x2.25	abce	Op	Op	1810	
HXC	6 5 1/2 x 6	66.2	164 2000	779.0	4.50	510 1000	L	Sil	2.44	2.31	.498	.498	30	HG	AI	4	3.00x2.25	abce	Op	Op	1810	
HXD	6 5 1/2 x 6	72.8	180 2000	955.0	4.50	555 1000	L	Sil	2.44	2.31	.498	.498	30	HG	AI	4	3.00x2.25	abce	Op	Op	1830	
HXE	6 5 1/2 x 6	79.4	198 2000	1335.0	4.50	615 1000	L	Sil	2.44	2.31	.498	.498	30	HG	AI	4	3.00x2.25	abce	Op	Op	1830	
INTERNATIONAL																						
FC-132	4 3 1/2 x 4	16.8	33 2800	132.7	6.00	89 1200	L	Sil	1.34	1.18	.310	.310	45	HG	CI	3	1.75x1.06	abce	Zen	1 1/2	347	
HD-213	6 3 3/4 x 4 1/2	26.3	78 3400	213.2	6.30	155 1000	L	Sil	1.68	1.46	.370	.370	45	Ch	CI	4	2.00x1.14	abce	Zen	1 1/2	474	
HD-232	6 3 3/4 x 4 1/2	26.3	81 3200	232.6	6.00	170 1000	L	Sil	1.68	1.34	.375	.375	45	HG	CI	4	2.00x1.14	abce	Zen	1 1/2	550	
FAB-241	6 3 3/4 x 4 1/2	27.3	84 3200	241.5	5.75	175 800	I	Sil	1.68	1.46	.342	.342	45	HG	CI	4	2.12x1.34	abce	Zen	1 1/2	742	
FAB-259	6 3 3/4 x 4 1/2	29.4	89 3200	259.7	5.74	192 800	I	Sil	1.68	1.46	.342	.342	45	HG	CI	4	2.12x1.34	abce	Zen	1 1/2	732	
FBB-298	6 3 3/4 x 4 1/2	33.7	94 2800	298.2	5.70	218 1600	I	Sil	1.87	1.75	.372	.372	45	HG	AI	4	2.25x1.40	abce	Zen	1 1/2	907	
FBB-361	6 4 x 4 1/2	40.8	111 2700	360.8	5.20	268 1500	I	Sil	2.25	1.62	.372	.372	45	HG	AI	4	2.25x1.40	abce	Zen	1 1/2	935	
FBB-401	6 4 x 4 1/2	40.8	114 2600	400.9	5.20	308 800	I	Sil	2.25	1.62	.372	.372	45	HG	AI	4	2.25x1.40	abce	Zen	1 1/2	945	
FBB-450	6 4 x 4 1/2	45.9	120 2400	451.0	5.20	331 800	I	Sil	2.25	1.62	.372	.372	45	HG	AI	4	2.25x1.40	abce	Zen	1 1/2	950	
FEB	6 5 x 5 1/2	60.0	140 2100	648.0	4.40	460 1000	I	Sil	2.37	2.37	.430	.430	45	HG	AI	4	2.75x2.25	abce	Zen	1 1/2	1790	
MACK																						
ENII	6 3 3/4 x 4 1/2	24.4	67 3000	210.0	5.75	145 1100	L	AUS	1.51	1.34	.339	.341	30	HG	CI	4	1.93x1.31	abc	Str	1 1/2	501	
FO	6 3 3/4 x 4 1/2	29.4	78 3000	253.0	5.69	166 1200	L	Sil	1.76	1.51	.406	.406	30	(h) HG	AI	5	2.25x1.56	abce	Str	1 1/2	749	
FM	6 3 3/4 x 4 1/2	31.6	83 3000	271.0	5.65	188 1200	L	Sil	1.76	1.51	.406	.406	30	(h) HG	AI	5	2.25x1.56	abce	Str	1 1/2	738	
FK	6 3 3/4 x 4 1/2	33.8	94 3000	290.0	5.68	200 1200	L	Sil	1.76	1.51	.406	.406	30	(h) HG	AI	5	2.25x1.56	abce	Str	1 1/2	759	
BG	6 3 3/4 x 5	31.6	96 2800	309.6	5.40	210 1000	L	MS	1.89	1.76	.375	.375	30	HG	CI	4	2.37x1.62	abce	Str	1 1/2	959	
CU	6 3 3/4 x 5	36.0	103 2600	353.9	5.25	250 1000	L	MS	1.89	1.76	.375	.375	30	HG	AI	5	2.37x1.62	abce	Str	1 1/2	907	
CE	6 4 x 5 1/2	38.4	108 2400	414.6	5.00	270 1000	L	MS	2.17	2.01	.500	.500	20	HG	CI	4	2.50x1.81	abce	Str	1 1/2	1199	
CF	6 4 x 5 1/2	43.3	118 2400	467.9	5.00	310 1000	L	MS	2.17	2.01	.500	.500	30	HG	AI	5	2.50x1.81	abce	Str	1 1/2	1209	
CT	6 4 x 5 1/2	48.6	126 2400	524.8	4.80	350 1000	L	MS	2.17	2.01	.500	.500	30	HG	AI	5	2.50x1.81	abce	Str	1 1/2	1214	
EO	6 4 x 5 1/2	45.7	148 2200	519.0	5.50	380 1000	I	MS	2.18	1.89	.437	.437	30	HG	AI	5	3.00x2.09	abce	Str	1 1/2	1687	
EP	6 4 x 5 1/2	54.1	160 2200	611.0	5.40	465 900	I	MS	2.18	1.89	.437	.437	30	HG	AI	5	3.00x2.09	abce	Str	2	1700	
EY	6 5 x 6	60.0	170 2100	706.5	5.30	500 800	I	MS	2.18	1.89	.437	.437	30	HG	AI	5	3.00x2.09	abce	Str	2	1710	
PLYMOUTH																						
PT-81	6 3 1/2 x 4 1/2	23.4	70 3000	201.3	6.70	148 1200	L	Sil	1.46	1.46	.340	.340	45	Ch	AI	4	1.93x1.00	abce	Car	1 1/2	527	
REO																						
212	6 3 1/2 x 4 1/2	25.3	77 3200	212.0	6.20	147 1000	L	Sil	1.78	1.62	.372	.371	45	Ch	AI	3	2.18x1.28	abce	Zen	1 1/2	749	
245	6 3 1/2 x 4 1/2	29.4	86 3400	245.0	6.20	174 1000	L	Sil	1.78	1.62	.372	.371	45	Ch	AI	4	2.18x1.28	abce	Zen	1 1/2	749	
288	6 3 1/2 x 5	29.4	87 3000	288.0	6.20	208 800	L	Sil	1.78	1.62	.372	.371	45	Ch	AI	4	2.18x1.28	abce	Zen	1 1/2	749	
310	6 3 1/2 x 5	31.5	97 2800	310.0	6.20	226 1000	L	Sil	1.78	1.62	.375	.371	45	Ch	AI	4	2.18x1.28	abce	Zen	1 1/2	749	
361	6 4 1/2 x 4 1/2	40.8	100 2800	361.0	6.00	254 800	L	Tun	2.06	1.87	.434	.432	30	Ch	AI	4	2.37x1.59	abce	Zen	1 1/2	749	
WAUKESHA																						
ICK	4 2 1/2 x 3 1/2	10.0	18 2800	61.3	5.70	40 1800	L	Sil	1.12	.937	.312	.312	45	HG	CI	3	1.56x1.25	ace	Op	Op	143	
FCS	4 2 1/2 x 4	12.1	26 2600	95.0	4.85	67 1100	L	Sil	1.34	1.34	.312	.312	45	HG	CI	3	1.75x1.06	abce	Op	Op	280	
FC	4 3 1/2 x 4	16.9	35 2600	133.0	5.58	92 1200	L	Sil	1.34	1.34	.312	.312	45	HG	CI	3	1.75x1.06	abce	Op	Op	290	
XAH	4 3 3/4 x 4 1/2	21.0	37 2200	186.0	4.60	121 900	L	Sil	1.56	1.56	.375	.375	45	HG	CI	4	2.00x1.50	abce	Op	Op	385	
GBM	6 3 3/4 x 4 1/2	31.5	77 2800	263.0	5.70	176 1100	L	Sil	1.68	1.43	.375	.375	45	HG	AI	4	2.00x1.50	abce	Op	Op	685	
GBK	6 3 3/4 x 4 1/2	33.8	82 2800	282.0	5.70	185 1100	L	Sil	1.68	1.43	.375	.375	45	HG	AI	4	2.00x1.50	abce	Op	Op	690	
GBZ	6 4x4 1/2	38.4	85 2800	320.0	5.75	210 1200	L	Sil	1.68	1.43	.375	.375	45	HG	AI	4	2.00x1.50	abce	Op	Op	706	
6-110	6 4x4 1/2	38.4	105 2500	358.0	5.10	254 1300	F	Sil	2.18													

ELECTRICAL EQUIPMENT

1. UNITS USED ON VARIOUS TRUCK MAKES AND MODELS AND BATTERY DATA — TABLE BELOW

NEW TABLES

The electrical equipment specifications presented on these pages provide truck maintenance men with data needed for servicing electrical units. The information is practically complete for 1938 truck models and there is much other information, some of it for models as far back as 1936. So far as Commercial Car Journal is aware this is the first time a comprehensive compilation of electrical unit test specifications has been attempted. There is little that maintenance men can do in the way of maintaining electrical equipment without a knowledge of the performance characteristics of the equipment. These tables are designed to provide that information in its most usable form.

ABBREVIATIONS:

*Each for 2 units.

**Each for 4 units.

AL—Autolite.

DR—Delco-Remy.

LN—Leece Neville.

M—Mallory.

NE—Northeast.

N—Negative.

P—Positive.

TRUCK MAKE AND MODEL	BATTERY			STARTING MOTOR Make and Model	GENERATOR Make and Model	REGULATOR Make and Model	DISTRIBUTOR Make and Model
	Amp. Hr. Capacity	Number of Plates	Terminal Grounded				
AUTOCAR							
A, B, UA, UB	118	15	P	DR-720T	DR-948V	None	DR-622D
RM, RL, D, UD, UDD	135	17	P	DR-724Z	DR-1100451	None	DR-649N
DF, N, NF, DH, DS	162	19	P	DR-724Z	DR-1100451	None	DR-4130
UDF, UN, UNF, US	152	19	P	DR-724Z	DR-1100451	None	DR-4126
T, C, STR	135*	17	P	LN-1066M	DR-930C	DR-5598	DR-4130
UT, 8UTR, 6X2UT	135*	17	P	LN-1066M	DR-930C	DR-5598	DR-4126
RMT, 1TR, 6X2RL	118*	15	P	DR-721P	DR-930C	DR-5598	DR-649N
1UTR, 6X2UD	118*	15	P	DR-721P	DR-930C	DR-5598	DR-649N
2TR, 3TR, 4TR	135*	17	P	DR-721P	DR-930C	DR-5598	DR-4130
2UTR, 3UTR, 4UTR	135*	17	P	DR-721P	DR-930C	DR-5598	DR-4126
RLD, DP	135	17	P	DR-724Z	DR-1100451	None	DR-649N
6X2DF, 6X2NF, 6X4DF	135*	17	P	DR-721P	DR-930C	DR-5598	DR-4130
6X2T, 6X4TO	135*	17	P	LN-1066M	DR-930C	DR-5598	DR-4130
6X4TD, 6X4TC, 4X4S	135*	17	P	LN-1066M	DR-930C	DR-5598	DR-4130
6X2UN, 6X2UNF	135*	17	P	DR-721P	DR-930C	DR-5598	DR-4126
6X4UTO, 6X4UTD	135*	17	P	LN-1066M	DR-930C	DR-5598	DR-4126
4X4DF, 4X4N, 4X4NF	152	19	P	DR-724Z	DR-1100451	None	DR-4130
BROCKWAY							
78	118	15	P	AL-MAJ4042	AL-GCS4803A5	AL-TC4302A	AL-IGW4008
83, 88, 92, 94	118	15	P	AL-MAJ4042	AL-GCS4803A5	AL-TC4302A	AL-IGW4017
112, 128	135	17	P	AL-MAB4071	AL-GCS4811A5	AL-TC4302A	AL-IGC4238B
98, 110, 125X, 130, 145, 150X4, 150X5	135	17	P	AL-MAB4071	AL-GCS4802-15	AL-TC4302A	AL-IGC4275
160X, 165X	135	17	P	AL-MAB4071	AL-GCS4802-5	AL-TC4302A	AL-IGC4220C
170X, 175X, 195X, 220X	152	19	P	AL-ML4180	AL-GCE4809	AL-VRB4008A	AL-IGE4003F
240X, 260X	118*	15	P	AL-MAS4003	AL-GCB4601	AL-VRA4102A	AL-IGE4003F
CHEVROLET							
All Trucks (1938)	94	15	N	DR-1107001	DR-948R	None	DR-1110008
CORBITT							
12B	101	13	P	AL-MAB4037	AL-GBY4601-5	None	AL-IGB4318
13B, F12	101	13	P	DR-718S	DR-1105734	DR-5598	DR-632S
17B, F14, 14BT	101	13	P	DR-1108703	DR-1105734	DR-5598	DR-SM1926
21B	101	13	P	DR-722N	DR-934N	DR-5597	DR-640L
26D, F23, F27, F35	101	13	P	DR-414	DR-934R	DR-5598	DR-666H
18BT	101	13	P	DR-722N	DR-SM1545	DR-5524	DR-SM1299
22BT, 27BT	101	13	P	DR-414	DR-417	DR-5524	DR-666H
F18	101	17	P	DR-724Q	DR-934M	None	DR-640L
DIAMOND-T							
201	95	15	P	AL-MAB4094	AL-GCM4816A	None	AL-IGW4008B
305, 306	95	15	P	AL-MAB4093	AL-GCM4816A	None	AL-IGW4008B
401, 402, 404, 405	95	15	P	AL-MAB4093	AL-GCM4816A	None	AL-IGW4005A
406	110	17	P	AL-MAB4093	AL-GCM4816A	None	AL-IGW4005A
507, 509, 611, 607, 612, 613, 609, 614	118	15	P	AL-MAB4093	AL-GCM4816A	None	AL-IGW4005A
802, 803, 804	152	19	P	AL-ML4180	AL-GCE4806	AL-URB4008A	AL-IGC4274A
DODGE							
RC, RD Series	90	15	P	AL-MAW4013A	AL-GBM4601-1	None	AL-IGS4010
RE Series	95	15	P	AL-MAW4013A	AL-GDF4801	AL-VRD4002B	AL-IGC4407D
RF Series	105	15	P	AL-MAW4013A	AL-GDF4801	AL-VRD4002B	AL-IGC4407D
RQ Series, RM Series	119	15	P	AL-MAX4031A	AL-GDA4801	AL-VRB4004B	AL-IGC4408
RL, RK, RO, RP Series	138	17	P	AL-MAX4039	AL-GAR0624	AL-VRB4005A	AL-IGC4408
FEDERAL							
9	100	13	P	DR-734Y	DR-968J	DR-5542	DR-1871479
10	100	13	P	DR-712E	DR-946K	None	DR-625H
11, 11H	100	13	P	DR-712E	DR-946J	None	DR-623P
15, 18, 20, 15H, 18H, 20H	100	13	P	DR-720QX	DR-1100008	DR-5820	DR-622D
25, 29, 29H, 29H	138	17	P	DR-720QX	DR-1100008	DR-5820	DR-622D
40, 40DR, 50, 50H	135	17	P	DR-724D	DR-936B	DR-5542	DR-640Z
C7, C7W, C8, C8W, C8H	135	17	P	DR-948P	DR-941H	DR-5585	DR-640Z
75, 80, 75H, 80H	100	13	P	DR-720QX	DR-1100458	DR-5820	DR-623D
85, 89, 85H, 89H	138	17	P	DR-720QX	DR-1100458	DR-5820	DR-623D
FORD	100	17	P	Ford	Ford	None	Ford
FWD							
HS	119	15	P	DR-720QX	DR-934U	DR-5828	M-Z
HO	119	15	P	DR-724D	DR-934C	DR-5828	M-Z
HM	170	19	P	DR-724D	DR-934C	DR-5828	M-Z
HH6	140	15	P	DR-724D	DR-934C	DR-5828	M-Z
SUA, SU, YU	140	15	N	DR-724Y	DR-968B	None	M-Z
MJ5, MJ6	140	15	P	DR-724Y	DR-934D	DR-5806	M-Z
M7	140	15	P	DR-578	DR-934D	DR-5806	M-Z
M10	140	15	P	LN-560M	DR-550	DR-5535	M-Y
MJ6X6	140	15	P	DR-724Y	DR-934D	DR-5806	M-Z
MeX6	140	15	P	DR-578	DR-550	DR-5535	M-Z
GENERAL MOTORS							
T14 to T155	86	13	P	DR-1107003	DR-1100452	None	DR-647D
T16, T16H	86	13	P	DR-734K	DR-1100452	None	DR-647F
T18, T18H	86	13	P	DR-738C	DR-1100452	None	DR-647G
T23, T23H, T33, T33H, F23, F23H, F33, F33H	115	15	P	DR-725D	DR-1100452	None	DR-647G
T46, F46	115	15	P	DR-725D	DR-848C	DR-005542	DR-4119
T61, T61H, F61, F61H	115	15	P	DR-725D	DR-948C	DR-005542	DR-4119
F16, F16H	86	13	P	DR-734K	DR-110452	None	DR-647D
F18, F18H	86	13	P	DR-738C	DR-110452	None	DR-647F
HUG							
HC, 16 Luggar	**	19		LN-1092	LN-1508G	LN-1508R	None
42		19		DR-722L	DR-934M	None	DR-643X
43, 87Q		19		DR-640	DR-953D	None	DR-643X
70K		19		DR-722L	DR-953D	None	DR-643X

Specifications



2. TEST SPECIFICATIONS OF GENERATORS, CHARGING CONTROLS, STARTERS AND DISTRIBUTORS

TRUCK MAKE AND MODEL	BATTERY			STARTING MOTOR Make and Model	GENERATOR Make and Model	REGULATOR Make and Model	DISTRIBUTOR Make and Model
	Amp. Hr. Capacity	Number of Plates	Terminal Grounded				
HUG—Continued							
88, 99, 99S	*	19		DR-578	DR-985A	None	DR-SM1141
44-4		19		DR-724D	DR-957Z	None	DR-640Z
45-4		19		DR-SM1219	DR-934D	None	M-Y-116G
46-4		19		DR-578	DR-985A	None	DR-SM1141
D42, D43	**	19		DR-708	DR-687	DR-5535	None
D43L, D98, D99, D99S	**	19		DR-646	DR-677	DR-5535	None
D870	**	19		DR-708	DR-687	DR-5535	None
MARMON-HERRINGTON							
E5, E8, LD2, OT1	100	17	P	Ford	Ford	Ford	Ford
C10-4	115	15	P	DR-720QX	DR-275Y	DR-410C	DR-622D
C20-4	115	15	P	DR-718R	DR-953D	DR-410C	DR-643X
C30-4	139	17	P	DR-720QX	DR-967Y	DR-410C	DR-622D
C40-4, C50-4	170	17	P	DR-413	DR-957W	DR-410K	DR-642T
C85-4, C70-4, C80-4	127	13	P	DR-412	DR-957X	DR-410K	DR-642T
C85DR4	127	13	P	DR-SM1307	DR-SM1168	DR-410K	DR-643X
C80-4	127	13	P	DR-SM1307	DR-SM1168	DR-410K	DR-643Y
TH515-4, TH520-4	150	15	P	DR-494	DR-934T	DR-410K	DR-4097
OSHKOSH							
JCB	120	17	N	DR-720QX	DR-967Y	None	DR-644S
JD	120	17	N	DR-720T	DR-967Y	None	DR-644S
B3S, B3D, C3S, C3D, FS	120	17	N	DR-413	DR-934S	DR-5599	DR-642S
FC, FB, FD	120	17	N	DR-412	DR-934T	DR-5801	AL-IGE4007A
BG3, GD	120	17	N	LN-660N	DR-934T	DR-5801	AL-IGE4015
REO							
480, 450L, 475, 475L							IGW-4020
650, 650L, 675, 675L	90	13	N	AL-MAJ4038	AL-GBM4608B	AL-VRD4004	IGW-4304B
1A4, 1C4	90	13	N	AL-MAJ4038	AL-GBM4601	None	AL-IGB4304B
1A4H, 1C4H, 1B7M, 2B7M	90	13	N	AL-MAW4001	AL-GBM4608B	None	AL-IGW4011
1B4, 1D4, 1B4H, 1D4H	90	13	N	AL-MAW4001	AL-GBM4608B	None	AL-IGB4325
2B4, 2D4	90	13	N	AL-MAW4001	AL-GBM4602	None	AL-IGB4325
2B4, 2D4	90	13	N	AL-MAW4001	AL-GBM4602	None	AL-IGB4325
2J6, 2H5	90	13	N	DR-1859497	AL-GBM4608B	None	DR-644M
				DR-SM1640	AL-GBM4602		AL-IGB4304B
IL5	90	13	N	MAW-4001	AL-GBM4608D	None	AL-IGB4325
2LM7, 2LMH7	240	25	N	MAW-4001	AL-GCE4812	AL-VRB4007	AL-IGB4011
	140	15	N			AL-VRB4102	AL-IGC4062
2L4, 2L4H, 2LC4	240	25	N	DR-718D	NE-6078	NE-3912B	DR-644M
	140	15	N	DR-1859497	NE-6115A		AL-IGB4325
				MAW-4001	AL-GBM4602		
STERLING							
FB50, FB60, FB70, FD70	140	21	P	DR-720V	DR-967V	None	DR-645J
FB80, FD90, FC90, FC95	140	21	P	DR-724D	DR-936B	None	DR-640Z
FD97, FC100, FC115, FC135,							
FD140, HC140	158	23	P	DR-371	DR-936B	None	M-Z116G
HC185, HC200, HC250	158*	23	P	DR-412	DR-968B	None	M-Z116G
FBI152, FWS152	140	21	P	DR-724D	DR-936B	None	DR-640Z
FDS180	158	23	P	DR-371	DR-936B	None	M-Z116G
HCS210	158*	23	P	DR-412	DR-968B	None	M-Z116G
STEWART							
40A	117	15	P	DR-734Y	DR-1101654	None	DR-1110402
80A	117	15	P	DR-734Y	DR-948J	None	DR-623H
81A	117	15	P	DR-737Y	DR-1101654	None	DR-1110021
82A	117	15	P	DR-734Y	DR-1101654	None	DR-1110021
47A, 58A	117	15	P	DR-720V	DR-967V	None	DR-645J
48A	133	17	P	DR-720V	DR-967V	None	DR-645J
51A	133	17	P	DR-1108202	DR-965Y	None	DR-4154
58A	133	17	P	DR-722W	DR-957Z	None	DR-EX30943
59A	133	17	P	DR-722W	DR-957Z	None	DR-4152
STUDEBAKER							
K5	105	15	P	AL-MAW4015	AL-GCJ4808A	AL-VRD4006B	AL-IGW4101
K10	105	15	P	AL-MAX4018	AL-GBM4607A	AL-CB4021	AL-IGW4101
K15, K15M	105	15	P	AL-MAX4018	AL-GBM4607B	AL-CB4021	AL-IGW4101
K20, K20M	136	17	P	DR-740K	DR-960E	DR-5830	DR-649V
K20D	136*	17	P	DR-850	DR-916J	DR-5806	None
K25, K25M	136	17	P	DR-740K	DR-960E	DR-5830	DR-649V
K30, K30M	153	19	P	DR-721L	DR-960D	DR-5830	DR-649U
WHITE							
700	105	15	P	DR-737E	DR-960F	None	DR-647H
704	105	15	P	DR-729L	DR-948B	None	DR-647H
704K	115	15	P	DR-729L	DR-934H	None	DR-647H
709	117	15	P	DR-729L	DR-948B	None	DR-647H
710, 712	117	15	P	DR-721M	DR-948B	None	DR-647H
718	100	13	P	DR-721M	DR-948B	None	DR-647H
750	133	17	P	DR-721M	DR-948B	None	DR-647H
750T	133	17	P	DR-721M	DR-934H	DR-5597	DR-647H
720, 720T, 820	136	17	P	DR-655	DR-934W	None	DR-4140
722	114	13	P	DR-575	DR-934X	None	DR-4140
800	105	13	P	AL-MAB4071	AL-4110A	None	AL-IGW4110A
802	105	13	P	AL-MAB4071	AL-4806A	None	AL-IGW4110A
805	117	15	P	DR-729L	DR-948B	None	DR-645Y
809, 810, 812, 818	117	15	P	DR-721M	DR-948B	None	DR-645Y
WILLYS							
38	78	13	N	AL-MZ4099	AL-4504	AL-CB4025	AL-IGS4007
Panel	78	13	N	AL-MZ4099	AL-GCS4809A	AL-TC-4317A	AL-IGS4007
Pickup	78	13	N	AL-MZ4099	AL-GCS-4300	AL-VRD4004A	AL-IGS4007

HOW TO USE

The tables on these and three succeeding pages contain the following data:

Battery specifications for each model of truck 46
List of truck models with the make and model numbers of electrical units used on them 46

Generator test specifications by unit make and model.... 48

Charging Control test specifications by unit make and model 49

Starter test specifications by unit make and model.... 50

Distributor test specifications by unit make and model.. 50

The chief purpose of the table on these two pages is to enable fleetmen to find out the make and model of the electrical equipment used as standard on particular truck models. After finding out the make and model of electrical equipment, fleetmen have only to turn to the tables indexed above to procure test specifications.

Electrical units generally carry plates or stampings that identify them as to make and model number. With this information fleetmen can refer directly to the tables giving test specifications. Electrical units should always be checked for this identification in order to catch non-standard or special installations.

GENERATORS

TEST SPECIFICATIONS

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
AUTO-LITE							
DG-4021...	2.6	30.6	8.0	1665			
DG-4023...	2.6	30.6	8.0	1665			
DG-4302...	2.6	30.6	8.0				
DG-4310...	2.6	30.6	8.0	1665			
DG-4311...	2.6	24.0	8.0	1790			
DGA-4302...	2.8	31.5	8.0	11225			
DGA-4601...	2.8	31.5	8.0	11225			
GAM-4504...	4.5	17.0	8.0	2400	12.8	7.9	2550
GAR-4315...	4.1	17.0	8.0	11185			
GAR-4515...	4.9	17.0	8.0	11100			
GAR-4522...	4.1	17.0	8.0	11185			
GAR-4525...	4.1	17.0	8.0	11185			
GAR-4543...	4.1	17.0	8.0	11185			
GAR-4545...	4.1	17.0	8.0				
GAR-4607...	4.1	21.0	8.0	11115			
GAR-4608C...	3.9	22.4	8.0	11100			
GAR-4608E...	3.9	22.4	8.0	2400	18.5	8.3	2500
GAR-4609B...	4.1	26.0	8.5	1075			
GAR-4614...	4.1	26.0	8.5	1075			
GAR-4622...	4.1	21.0	8.0	11115			
GAR-4623...	4.1	26.0	8.5	1075			
GAR-4624...	3.9	22.4	8.0	11100			
GAR-4631...	3.9	22.4	8.0	11100			
GAR-4635...	3.9	22.4	8.0	11100			
GBB-4304...	3.6	18.0	15.0				
GBD-4002...	2.2	22.0	8.0	1790			
GBE-4601...	3.0	16.0	15.0				
GBG-4604...	1.4	40.0	15.0	1050	40.0	15.0	1100
GBM-4601...	4.2	22.0	8.6	1050			
GBM-4602...	4.2	22.0	8.6	2300	18.0	8.0	2400
GBM-4604A...	4.2	18.0	8.5	2150	18.0	8.5	2450
GBM-4604B...	4.2	18.0	8.0	1160			
GBM-4606-1...	4.0	18.0	8.0	2300	16.0	8.0	2600
GBM-4606B...	4.2	19.0	8.0	1150			
GBM-4607A...	4.2	18.0	8.0	2050	14.6	8.0	2300
GBM-4607B...	4.2	18.0	8.0				
GBM-4608A...	4.0	20.0	8.0	2100	18.0	8.0	2400
GBM-4608B...	4.2	22.0	8.6	1050			
GBM-4608D...	4.2	22.0	8.6	1050			
GBR-4605...	4.6	23.0	8.0				
GBR-4608...	4.6	23.0	8.0				
GBW-4602...	1.8	23.0	8.0				
GBW-4803D...	1.9	22.0	8.0	1800			
GBW-4804A...	1.7	22.0	8.0	1800	22.0	8.0	2400
GBX-4601...	3.0	30.0	8.0	2000	26.0	8.0	2000
GBX-4601A...	3.0	30.0	8.0	2000	26.0	8.0	2000
GBX-4602...	3.1	30.8	8.0				
GBY-4601-5...	2.8	21.0	8.0	1250	19.0	8.0	1300
GBY-4802...	2.9	22.0	8.0	1660			
GCB-4601...	1.7	20.0	8.0	1925			
GCB-4802...	1.7	20.0	8.0	1925			
GCB-4808...	1.6	25.0	8.0	1000	25.0	8.0	1150
GCB-4809A...	1.6	25.0	8.0	1000	25.0	8.0	1150
GCB-4810A...	1.6	25.0	8.0	1000	25.0	8.0	1150
GCD-4801...		20.0	15.0	1120	20.0	15.0	1400
GCE-4806...	1.9	30.0	8.0	1500			
GCE-4809...	1.7	30.0	8.0	1400	30.0	8.0	1600
GCE-4810...	1.9	30.0	8.0	1500			
GCE-4812...	1.8	31.0	8.0				
GCE-4814A...	1.7	30.0	8.0	1400	30.0	8.0	1600
GCE-4815A...	1.7	30.0	8.0	1400	30.0	8.0	1600
GCH-4601...	1.3	40.0	8.0	1070			
GCJ-4802B...	2.1	26.0	8.0	1135			
GCJ-4802C...	2.0	25.0	8.0	2500	22.0	8.0	2800
GCJ-4805A...	2.0	25.0	8.0	2500	22.0	8.0	2800
GCJ-4805B...	2.1	26.0	8.0				
GCJ-4806...	2.1	26.0	8.0				
GCJ-4808A...	2.1	25.0	7.6	1135			
GCM-4802A...	3.9	23.0	8.0	11100			
GCM-4807A...	3.7	22.0	8.0	2600	18.0	8.0	2600
GCM-4808...	3.7	22.0	8.0	2600	18.0	8.0	2600
GCM-4809A...	3.7	22.0	8.0	2600	18.0	8.0	2600
GCM-4810...	3.9	23.0	8.0	11100			

GENERATOR MAKE AND MODEL	Field Amps. at 6 Volts	MAXIMUM OUTPUT					
		COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
GCM-4815A	3.7	22.0	8.0	2600	18.0	8.0	2600
GCM-4816A	3.7	22.0	8.0	2600	18.0	8.0	2600
GCS-4802-5	3.7	20.0	8.0	2000	16.0	8.0	2100
GCS-4803A5	3.7	20.0	8.0	2000	16.0	8.0	2100
GCS-4804A	3.9	21.0	8.0	1825			
GCS-4804B	3.7	20.0	8.0	2000	16.0	8.0	2100
GCS-4805A	3.9	21.0	8.0				
GCS-4806A	3.7	20.0	8.0	2000	16.0	8.0	2100
GCS-4811A5	3.7	20.0	8.0	2000	16.0	8.0	2100
GCW-4804A	1.4	17.0	15.0	1160	17.0	15.0	1250
GDA-4801		28.0	8.0	2020	28.0	8.0	2800
GDA-4803A		28.0	8.0	2020	28.0	8.0	2800
GDF-4801	2.0	30.0	8.0	3200	28.0	8.0	3400

DELCO-REMY

417	1.35-1.48*	24-26	13.0	1600	18	13.0	3000
469	1.09-1.20*	40	13.0	1100	40	13.0	3000
508	1.78-1.92*	57	13.0	800	57	13.0	3000
511	1.78-1.92*	80	13.0	800	80	13.0	3000
518	1.78-1.92*	57	13.0	800	57	13.0	3000
519	1.78-1.92*	80	13.0	800	80	13.0	3000
535	1.09-1.20*	40	13.0	1100	40	13.0	3000
539	1.09-1.20*	40	13.0	1100	40	13.0	3000
550	1.35-1.48*	24-28	13.0	1600	18	13.0	3000
555	1.35-1.48*	24-28	13.0	1600	18	13.0	3000
557	1.39-1.47*	13-15	13.0	1200	10	13.0	3000
561	1.39-1.47*	24-26	13.0	1100	18	13.0	3000
563	3.53-3.75	40	7.0	950	40	7.0	3000
564	3.53-3.75	28-32	7.0	1000	22-24	7.0	1200
604	3.53-3.75	28-32	7.0	1000	22-24	7.0	1200
607	1.26-1.43*	40	13.0	1250			
608	3.53-3.75	40	7.0	950	40	7.0	3000
609	3.53-3.75	40	7.0	950	40	7.0	3000
614	2.50-2.85	50	7.5	800	50	7.5	3000
615	1.09-1.20*	40	13.0	1100	40	13.0	3000
616	3.53-3.75	28-32	7.0	1000	22-24	7.0	1200
622	1.09-1.20*	40	13.0	1100	40	13.0	3000
625	1.09-1.20*	40	13.0	1100	40	13.0	3000
630	1.09-1.20*	40	13.0	1100	40	13.0	3000
634	1.09-1.20*	40	13.0	1100	40	13.0	3000
670	3.53-3.75	40	7.0	950	40	7.0	3000
671	3.53-3.75	40	7.0	950	40	7.0	3000
672	1.39-1.47*	40	13.0	1400	40	13.0	3000
673	3.53-3.75	40	7.0	950	40	7.0	3000
674	3.53-3.75	28-32	7.0	1000	22-24	7.0	1200
677	1.39-1.47*	24-26	13.0	1100	18	13.0	3000
680	3.53-3.75	40	7.0	950	40	7.0	3000
682	1.26-1.33*	33	13.0	950	33	13.0	3000
687	1.35-1.48*	24-26	13.0	1600	18	13.0	3000
688	3.53-3.75	40	7.0	950	40	7.0	3000
689	3.53-3.75	40	7.0	950	40	7.0	3000
690	1.26-1.33*	33	13.0	950	33	13.0	3000
692	1.26-1.43*	40	13.0	1250			
693	1.26-1.43*	40	13.0	1250			
694	1.26-1.33*	33	13.0	950	33	13.0	3000
696	1.26-1.33*	33	13.0	950	33	13.0	3000
697	1.39-1.47*	40	13.0	1400	40	13.0	3000
699	1.26-1.43*	40	13.0	1250			
916B	1.25-1.45*	17	14.5-14.7	1250			
916G	1.25-1.45*	17	14.5-14.7	1250			
916H	1.7-2.0	26	8.1-8.3	1325			
916J	1.25-1.45*	17	14.5-14.7	1250			
916K	1.7-2.0	26	8.1-8.3	1325			
925F	2.7-3.0	30	8.0	1800	28	8.0	1900
925H	2.7-3.0	30	8.0	1800	28	8.0	1900
928B	1.08-1.15*	17	14.5-14.7	1650			
930C	1.08-1.15*	17	14.5-14.7	1650			
930G	1.8-2.3	28	8.0	1450			
930H	1.8-2.3	26	8.1-8.3	1450			
932A	2.7-3.0	25-28	9.0-9.4	1900	20-24	8.5-8.9	2100
932B	3.5-4.0	22-24	8.6-9.0	1300	13.5-16.5	7.7-8.1	1700
934C	1.7-2.0	28	8.0	1400			
934D	1.25-1.45*	17	14.5-14.7	1250			
934E	1.7-2.0	28	8.0	1400			
934F	1.7-2.0	26	8.1-8.3	1325			
934G	1.25-1.45*	17	14.5-14.7	1250			
934H	1.7-2.0	28	8.0	1400			
934J	1.25-1.45*	17	14.5-14.7	1250			
934M	1.7-2.0	28	8.0	1400			
934N	1.25-1.45*	17	14.5-14.7	1250			
934P	1.7-2.0	28	8.0	1400			
934R	1.25-1.45*	17	14.5-14.7	1250			
934S	1.7-2.0	28	8.0	1400			
934T	1.25-1.45*	17	14.5-14.7	1250			
934U	1.7-2.0	28	8.0	1400			
934V	1.25-1.45*	17	14.5-14.7	1250			
934W	1.7-2.0	28	8.0	1400			
934X	1.25-1.45*	17	14.5-14.7	1250			
935P	2.3-2.6	18-21	8.2-8.5	2400	15-18	7.9-8.3	2900
935Z	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
936B	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
936M	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
937R	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
937Y	3.5-4.5	15-18	7.9-8.3	2000	13-15	7.7-8.0	2400
938E	4.0-6.1	15-17	7.9-8.1	1400	11-14	7.5-7.8	1750
938J	3.3-4.0*	15-18	15.9-16.6	2800	13-15	15.5-16.0	2800
939Y	2.6-3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
941H	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900

GENERATORS—continued

GENERATOR MAKE AND MODEL	Field Amps. at 6 Volts	MAXIMUM OUTPUT					
		COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
942H.....	4.0-5.9	13-15	7.7-8.0	1600	10-12	7.5-7.7	1800
943V.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948B.....	3.5-4.5	15-18	7.9-8.3	2000	13-15	7.7-8.0	2400
948C.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948D.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948E.....	3.5-4.5	15-18	7.9-8.3	2000	13-15	7.7-8.0	2400
948H.....	3.5-4.5	19-22	8.3-8.7	2400	16-19	8.0-8.4	2600
948J.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948N.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948P.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948S.....	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
948C.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
948F.....	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
948G.....	2.3-2.6	23-27	8.8-9.0	3000	18-23	8.2-8.7	3200
948H.....	2.3-2.6	23-27	8.8-9.0	3000	18-23	8.2-8.7	3200
948J.....	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
948K.....	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
948L.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
948V.....	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
953G.....	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
953Y.....	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
955.....	1.54-1.71*	54	13.0	1000			
956D.....	4.0-6.1	20-22	8.4-8.6	1550	10-12	7.4-7.6	1700
956E.....	4.0-6.1	20-22	8.4-8.6	1550	10-12	7.4-7.6	1700
957M.....	2.5-3.0	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
957T.....	4.0-6.1	18-20	8.3-8.5	1300	9-12	7.3-7.6	1400
957W.....	2.8-3.5	19-21	8.4-8.6	1800	11-14	7.5-7.6	2000
957X.....	2.5-3.0	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
957Y.....	1.75-2.25	17-20	8.2-8.5	1900	13-15	7.7-8.0	1900
957Z.....	2.8-3.5	23-26	8.8-9.2	1900	13-16	7.7-8.1	2200
958A.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
958C.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
958D.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
958E.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
958L.....	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
958Y.....	4.0-6.1	15-17	7.9-8.1	1400	11-14	7.5-7.8	1750
960C.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
960D.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
960E.....	2.3-2.6	22-25	8.7-9.1	3000	17-20	8.1-8.5	3200
960F.....	3.5-4.5	15-18	7.9-8.3	2000	13-15	7.7-8.0	2400
962.....	3.5-4.5	13-16	7.7-8.1	2100	10-13	7.4-7.8	2200
965A.....	2.5-3.0	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
965W.....	2.8-3.5	23-26	8.8-9.2	1900	13-16	7.7-8.1	2200
967V.....	4.0-6.1	18-20	8.3-8.5	1300	9-12	7.3-7.6	1400
967Y.....	2.8-3.5	23-26	8.8-9.2	1900	13-16	7.7-8.1	2200
968B.....	2.5-3.0	14-16	15.7-16.1	1700	12-14	15.3-15.7	1850
968G.....	2.8-3.5	22-25	8.7-9.0	1800	13-16	7.8-8.1	2000
968H.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
968J.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
968K.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
968P.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
968T.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
968V.....	4.0-6.1	18-20	8.3-8.5	1300	9-12	7.3-7.6	1400
977K.....	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
977L.....	1.53-1.67	26-28	7.0	1400	21-23	7.0	1600
977P.....	1.53-1.67	26-28	7.0	1400	21-23	7.0	1600
978A.....	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
SM1168.....	2.5-3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
SM1545.....	1.35-1.48*	24-26	13.0	1600	18	13.0	3000
SM1909.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
1100006.....	2.3-2.6	26-30	8.0	3400	25-28	8.0	3500
1100008.....	2.3-2.6	26-30	8.0	3400	25-28	8.0	3600
1100451.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
1100452.....	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
1100456.....	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
1100458.....	2.3-2.6	23-27	8.8-9.0	3000	18-23	8.2-8.7	3200
1100459.....	2.3-2.6	18-21	8.2-8.5	2400	15-18	7.9-8.3	2900
1101654.....	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
1101702.....	2.6-3.1*	11-13	15.0	2400	9-12	14.7-15.0	2600
1101708.....	2.6-3.1*	11-13	15.0	2400	9-12	14.7-15.0	2600
1101714.....	1.5-1.6*	18-21	15.0	3400	15-18	15.0	3500
1102402.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
1102403.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
1102404.....	4.0-6.1	20-22	8.4-8.6	1550	10-12	7.4-7.6	1700
1102405.....	4.0-6.1	18-20	8.3-8.5	1300	9-12	7.3-7.6	1400
1102407.....	2.8-3.5	18-20	8.2-8.5	2000	15-17	7.9-8.2	2200
1105201.....	1.08-1.15*	17	14.5-14.7	1650			
1105529.....	1.7-2.0	28	8.0	1400			
1105530.....	1.7-2.0	28	8.0	1400			
1105726.....	1.25-1.45*	17	14.5-14.7	1250			
1105727.....	1.25-1.45*	17	14.5-14.7	1250			
1105732.....	1.25-1.45*	17	14.5-14.7	1250			
1105734.....	1.25-1.45*	17	14.5-14.7	1250			
1105735.....	1.25-1.45*	17	14.5-14.7	1250			
1105753.....	.63-.69S	5-7	26.0	2000	3-4.5	26.0	3500
1106252.....	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106254.....	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106255.....	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106576.....	.91-.98	35	8.0	1400			
1106579.....	.91-.98	35	8.0	1400			
1106580.....	.91-.98	35	8.0	1400			
1106827.....	1.20-1.27*	25	13.0	1200			
1106828.....	1.20-1.27*	25	13.0	1200			
1106830.....	1.20-1.27*	25	13.0	1200			
1106831.....	1.20-1.27*	25	13.0	1200			
1106832.....	1.20-1.27*	25	13.0	1200			
1106835.....	1.20-1.27*	25	13.0	1200			
1106836.....	1.20-1.27*	25	13.0	1200			
1107013.....							
1117003.....	3.5-3.7	28-32	7.0	1000	22-24	7.0	1200
1117004.....	1.2-1.4*	40	13.0	1250			
1117011.....	3.5-3.7	28-30	7.0	1000	22-24	7.0	1200
1117012.....	1.26-1.33*	40	13.0	1250			
1117501.....	1.78-1.92*	57	13.0	800	57	13.0	3000

CHARGING CONTROLS

TEST SPECIFICATIONS

UNIT MODEL NUMBER	CUT-OUT RELAY		CURRENT REGULATOR		VOLTAGE REGULATOR	
	Closing Volts	Opening Amps.	Point Open (Inches)	Current Setting (Amp.)	Voltage Setting Closed Circuit (†) Open Circuit (†) Volts-Points Open (†)	
					70°F.	110°F.
AUTO-LITE						
C 8-4012	6.7-7.5	.5-2.5				
C 8-4013	13.5-16.0	.5-2.5				
C 8-4014	6.7-7.5	.5-2.5				
C 8-4014C	6.7-7.5	.5-2.5				
C 8-4021	6.7-7.5	.5-2.5				
C 8-4025	6.7-7.5	.5-2.5				
RA-4004	6.5-7.2	.5-2.5				
TC-4301A	6.5-7.2	.5-2.5			8.2-8.7*	7.9-8.4*
TC-4302A	6.5-7.2	.5-2.5			8.2-8.7*	7.9-8.4*
TC-4303C	13.5-16.0	.5-2.5			16.6-17.4*	16.0-16.8*
TC-4306A	6.5-7.2	.5-2.5			8.2-8.7*	7.9-8.4*
TC-4317A	6.5-7.2	.5-2.5			8.2-8.7*	7.9-8.4*
VRA-4102A	13.0-13.5	.5-4.0	.010 min.	19-21	14.4-14.7†	
VRB-4002C	6.4-7.0	.5-3.0	.010-.020	25	7.3-7.6†	7.1-7.4†
VRB-4004R	6.4-7.0	.5-3.0	.010-.020	28	7.3-7.6†	7.1-7.4†
VRB-4004C	6.4-7.0	.5-3.0	.010-.020	24-26	7.3-7.6†	7.1-7.4†
VRB-4005A	6.4-7.0	.5-3.0	.010-.020	22	7.3-7.6†	7.1-7.4†
VRB-4007A	6.4-7.0	.5-3.0	.010-.020	29-31	7.3-7.6†	7.1-7.4†
VRB-4008A	6.4-7.0	.5-3.0	.010-.020	30	7.3-7.6†	7.1-7.4†
VRB-4008B	6.4-7.0	.5-3.0	.010-.020	24-26	7.3-7.6†	7.1-7.4†
VRB-4009A	6.4-7.0	.5-3.0	.010-.020	24-26	7.3-7.6†	7.1-7.4†
VRC-4101A	6.5-7.2	.5-4.0	.010 min.	39-41	7.4-7.9†	
VRD-4002A	6.4-7.0	.5-3.0			7.3-7.6†	7.1-7.4†
VRD-4002B	6.4-7.0	.5-3.0			7.3-7.6†	7.1-7.4†
VRD-4004A	6.4-7.0	.5-3.0			7.3-7.6†	7.1-7.4†
VRD-4006B	6.4-7.0	.5-3.0			7.3-7.6†	7.1-7.4†
VRE-4002B	13.0-13.7	.5-3.0	.010-.020	16-18	14.2-14.8†	14.0-14.6†
VRE-4002C	13.0-13.7	.5-3.0	.010-.020	19-21	14.2-14.8†	14.0-14.6†
					70°F.	150°F.
DELCO-REMY						
265B	7.0-7.5	0-3.0				
265C	7.0-7.5	0-3.0				
265H	7.0-7.5	0-3.0				
266P	7.0-7.5	0-3.0				
267B	13.5-14.0	0-2.0				
5524	13.5	0-3.0	.015	40		15.0*
5526	13.5	0-3.0				15.0*
5534	7.0	0-3.0				8.5*
5535	13.5	0-3.0				15.0*
5538	7.0	0-3.0				8.5*
5540	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5542	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5544	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5567	7.0	0-3.0	.015	40		15.0*
5576	13.5	0-3.0	.015	33		15.0*
5577	7.0	0-3.0	.015	50		8.5*
5579	13.5	0-3.0	.015	55		15.0*
5584	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5585	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5590	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5597	6.9-7.6	0-4.0	.020	26-28	7.0-7.4†	6.9-7.1†
5598	12.8-14.4	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5599	6.9-7.6	0-4.0	.020	26-28	7.0-7.4†	6.9-7.1†
5600	6.9-7.6	0-4.0			7.2-7.6†	7.2-7.4†
5604	13.5	0-3.0	.015	40		15.0*
5607	6.3-6.9	0-4.0			7.6-8.0*	7.5-7.9*
5601	12.8-14.4	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5603	6.9-7.6	0-4.0			7.2-7.6†	7.2-7.4†
5605	6.3-6.9	0-3.0			8.3-8.7*	7.2-8.2*
5606	12.3-13.7	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5610	6.9-7.6	0-4.0	.020	24-26	7.0-7.4†	6.9-7.1†
5620	6.9-7.6	0-4.0			7.2-7.6†	7.2-7.4†
5621	6.3-6.9	0-4.0			7.6-8.0*	7.5-7.9*
5624	13.0-14.2	0-4.0			15.4-16.3*	14.4-15.3*
5628	6.3-6.9	0-4.0	.020	26-28	7.0-7.4†	6.9-7.1†
5630	6.3-6.9	0-3.0			8.3-8.7*	7.7-8.2*
5636	12.3-13.7	0-4.0	.020	24-26	14.2-15.0†	14.1-14.5†
5641	12.3-13.7	0-4.0	.020	24-28	14.2-15.0†	14.1-14.5†
5647	6.9-7.6	0-4.0	.020	34-36	7.0-7.4†	6.9-7.1†
5662	6.2-6.8	0-4.0			7.3-7.6*	7.2-7.3*
5666	12.4-13.6	0-4.0			14.2-15.0†	14.1-14.5†

STARTERS

TEST SPECIFICATIONS

UNIT MODEL NUMBER	LOCK TEST			NO LOAD			UNIT MODEL NUMBER	LOCK TEST			NO LOAD		
	Volts	Amps	Torque	Volts	Amps	RPM		Volts	Amps	Torque	Volts	Amps	RPM
AUTO-LITE													
MAB-4028	3.0	582	15.8	5.5	60	3700	548	5.0	700	51	11.2	75	2400
MAB-4030	3.0	582	15.8	5.5	60	3700	575	4.8	725	44	12.0	85	4500
MAB-4037	3.0	525	17.0	5.5	46	4020	578	4.8	725	44	12.0	85	4500
MAB-4071	3.0	582	15.8	5.5	60	3700	579	4.8	725	44	12.0	85	4500
MAB-4091	4.0	750	21.5	5.5	60	3700	586	4.8	725	44	12.0	85	4500
MAB-4093	4.0	750	21.5	5.5	60	3700	590	5.3	670	32	11.2	80	4500
MAB-4094	4.0	750	21.5	5.5	60	3700	640	3.0	500	19	5.0	70	3000
MAJ-4038	4.0	750	17.0	5.5	67	4100	646	3.0	500	25	22.0	85	6000
MAJ-4042	4.0	750	17.0	5.5	67	4100	650	3.0	500	25	22.0	85	6000
MAS-4003	6.0	440	20.0	11.0	35	4100	655	3.0	500	19	5.0	70	3000
MAS-4008	6.0	440	20.0	11.0	35	4100	668	3.0	500	25	22.0	85	6000
MAU-4005	8.0	730	23.5	11.0	65	4800	708	3.0	500	25	22.0	85	6000
MAU-4009	8.0	730	23.5	11.0	65	4800	711	3.0	500	25	22.0	85	6000
MAU-4012	8.0	730	23.5	11.0	65	4800	712E	3.6	450	11	5.0	70	4500
MAU-4013	8.0	730	23.5	11.0	65	4800	714B	3.3	525	12	5.0	65	5000
MAU-4014	8.0	730	23.5	11.0	65	4800	718D	3.1	570	15	5.0	65	6000
MAW-4001	4.0	670	18.0	5.5	65	4900	718F	3.1	570	15	5.0	65	6000
MAW-4005	4.0	670	18.0	5.5	65	4900	718R	3.1	570	15	5.0	65	6000
MAW-4013	4.0	670	18.0	5.5	65	4900	718S	7.5	450	15	11.3	65	6000
MAW-4013A	4.0	670	18.0	5.5	65	4900	720X	3.1	570	15	5.0	65	6000
MAW-4015	4.0	670	18.0	5.5	65	4900	720T	3.1	570	15	5.0	65	6000
MAX-4007	4.0	880	25.0	5.5	65	5300	720V	3.1	570	15	5.0	65	6000
MAX-4009	4.0	880	25.0	5.5	65	5300	720X	3.1	570	15	5.0	65	6000
MAX-4018	4.0	800	25.0	5.5	65	5300	721E	6.5	490	28	10.0	70	3000
MAX-4019	4.0	800	25.0	5.5	65	5300	721K	3.0	600	22	5.0	70	3500
MAX-4028	4.0	880	25.0	5.5	65	5300	721L	3.0	600	22	5.0	70	3500
MAX-4031	4.0	880	25.0	5.5	65	5300	721M	3.0	600	22	5.0	70	3500
MAX-4031A	4.0	880	25.0	5.5	65	5300	721P	6.5	490	28	10.0	70	3000
MAX-4032	4.0	880	25.0	5.5	65	5300	722L	3.0	600	22	5.0	70	3500
MAX-4033	4.0	880	25.0	5.5	65	5300	722N	6.5	490	28	10.0	70	3000
MAX-4034	4.0	880	25.0	5.5	65	5300	722T	3.0	600	22	5.0	70	3500
MAX-4035	4.0	880	25.0	5.5	65	5300	722W	3.0	600	22	5.0	70	3500
MAX-4039	4.0	880	25.0	5.5	65	5300	724D	3.0	600	22	5.0	70	3500
MBA-4001	4.0	700	17.0	5.0	60	4300	724Q	3.0	600	22	5.0	70	3500
ML-4162	4.0	750	26.0	5.5	50	2980	724R	3.0	600	22	5.0	70	3500
ML-4163	4.0	750	26.0	5.5	50	2980	724U	3.0	600	22	5.0	70	3500
ML-4179	4.0	750	26.0	5.5	50	2980	724V	6.5	490	28	10.0	70	3000
ML-4180	4.0	750	26.0	5.5	50	2980	724Z	3.0	600	22	5.0	70	3500
ML-4186	4.0	750	26.0	5.5	50	2980	725B	3.0	600	16	5.0	60	6000
MR-4108	4.0	700	43.0	11.0	50	4300	725D	3.0	600	16	5.0	60	6000
MZ-4049	4.0	560	11.8	5.5	70	4300	725P	6.7	530	16	10.0	70	7000
DELCO-REMY													
371	3.0	500	19	5.0	70	3000	727	3.5	500	45	8.0	75	2000
412	5.3	670	32	11.2	80	4500	729L	3.0	600	16	5.0	65	5500
413	3.0	500	19	5.0	70	3000	730	3.0	600	24	12.0	100	6000
414	5.3	670	32	11.2	80	4500	733	3.0	600	24	12.0	100	6000
494	3.5	500	45	8.0	75	2000	734K	3.3	525	12	5.0	65	5000
							734X	3.3	525	12	5.0	65	5000
							734Y	3.3	525	12	5.0	65	5000

UNIT MODEL NUMBER	LOCK TEST			NO LOAD		
	Volts	Amps	Torque	Volts	Amps	RPM
734Z	3.3	525	12	5.0	65	5000
735	3.0	500	25	22.0	85	6000
736C	3.1	570	15	5.0	65	6000
736G	3.1	570	15	5.0	65	6000
736U	7.5	450	15	11.3	65	6000
736V	3.1	570	15	5.0	65	6000
736Y	3.1	570	15	5.0	65	6000
736Z	7.5	450	15	11.3	65	6000
737B	3.1	570	15	5.0	65	6000
737D	3.1	570	15	5.0	65	6000
737E	3.1	570	15	5.0	65	6000
737F	7.5	450	15	11.3	65	6000
737G	3.1	570	15	5.0	65	6000
737H	7.5	450	15	11.3	65	6000
737P	7.5	450	15	11.3	65	6000
737R	3.1	570	15	5.0	65	6000
737T	3.1	570	15	5.0	65	6000
737W	7.5	450	15	11.3	65	6000
737Y	3.1	570	15	5.0	65	6000
737Z	3.1	570	15	5.0	65	6000
738	3.0	500	25	22.0	85	6000
738C	3.3	525	12	5.0	65	5000
738G	3.3	525	12	5.0	65	5000
738N	3.3	525	12	5.0	65	5000
739A	3.3	525	12	5.0	65	5000
739E	3.3	525	12	5.0	65	5000
739H	3.3	525	12	5.0	65	5000
740K	3.1	570	15	5.0	65	6000
740L	7.5	450	15	11.3	65	6000
751	3.0	500	25	22.0	85	6000
755	5.0	700	55	11.2	75	2250
805	4.3	800	60	23.3	90	6800
SM1219	5.3	670	32	11.2	80	4500
SM1307	5.3	670	32	11.2	80	4500
SM1640	7.5	450	15	11.3	65	6000
SM1646	6.5	490	28	10.0	70	3000
SM1937	7.5	450	15	11.3	65	6000
1107001	3.3	525	12	5.0	65	5000
1107003	3.3	525	12	5.0	65	5000
1107006	3.3	525	12	5.0	65	5000
1107009	3.3	525	12	5.0	65	5000
1107010	3.3	525	12	5.0	65	5000
1107012	3.3	525	12	5.0	65	5000
1107404	3.1	570	15	5.0	65	6000
1107407	3.1	570	15	5.0	65	6000
1107408	3.1	570	15	5.0	65	6000
1107413	3.1	570	15	5.0	65	6000
1107414	3.1	570	15	5.0	65	6000
1107418	3.1	570	15	5.0	65	6000
1107420	3.1	570	15	5.0	65	6000
1107801	7.5	450	15	11.3	65	6000
1107803	7.5	450	15	11.3	65	6000
1107809	7.5	450	15	11.3	65	6000
1107906	3.0	600	16	5.0	60	6000
1108102	6.7	530	16	10.0	70	7000
1108103	6.7	530	16	10.0	70	7000
1108104	6.7	530	16	10.0	70	7000
1108202	3.0	600	22	5.0	70	3500
1108401	6.5	490	28	10.0	70	3000
1108402	6.5	490	28	10.0	70	3000
1108404	6.5	490	28	10.0	70	3000
1108451	3.0	600	28	5.0	70	2500
1108452	3.0	600	28	5.0	70	2500
1108531	6.7	530	33	10.0	70	2500
1108551	3.0	600	16	5.0	65	5500
1108576	7.5	450	15	11.3	65	6000
1108677	6.7	530	33	10.0	70	2500

DISTRIBUTORS

TEST SPECIFICATIONS

UNIT MODEL NUMBER	Contact Point Opening	Breaker Arm Tension (Oz.)	Centrifugal Advance Eng. deg. & R.P.M.		Rotation Viewed From Top
			At Start	Maximum	
AUTO-LITE					
IGB4304B	.022	18	600	10@2100	CCW
IGB4318	.022	18	600	20@3000	CCW
IGB4325	.022	18	600	16@3200	CW
IGC4062	.022	18	500	12@3200	CW
IGC4220C	.022	18	600	11@2300	CCW
IGC4236B	.022	18	500	17@2400	CCW
IGC4274A	.022	18	550	12@2300	CW
IGC4275	.022	18	600	22@2300	CCW
IGC4407D	.022	18	700	13@2900	CW
IGC4408	.022	18	700	29@3300	CW
IGE4003F	.022	18	400	22@1800	CCW
IGE4007A	.022	18	860	12@1800	CW
IGE4016	.022	18	600	18@2000	CW
DELCO-REMY					
IGS4007	.022	18	500	14@3400	CCW
IGS4010	.022	18	700	24@3500	CW
IGW4005A	.022	18	550	12@1800	CW
IGW4006B	.022	18	800	18@2800	CW
IGW4008	.022	18	600	20@2100	CCW
IGW4011	.022	18	600	16@3000	CW
IGW4017	.022	18	600	14@2000	CW
IGW4020	.022	18	600	13@2000	CCW
IGW4101	.022	18	800	20@2800	CCW
DELCO-REMY					
622D	.018-.024	17-21	2@600	16@2200	CW
623D	.018-.024	17-21	3@600	20@2200	CW
623H	.018-.024	17-21	1@800	17@2200	CCW

STATE	State Gasoline Tax	State Diesel Fuel Tax	DIESEL TAX REMARKS
Alabama	6	6	So far not collected.
Arizona	5	5	Collected by seller.
Arkansas	6½	6½	Collected by seller.
California	3	3	Same as gasoline tax.
Colorado	4	4	Same, according to law, but not assessed. Taxed if used on highways.
Connecticut	3	3	Collected by distributor.
Delaware	4	4	Same. Diesels pay twice the registration fee.
Dist. of Col.	2	No	Not taxable unless mixed with gasoline.
Florida	7	No	No tax at present.
Georgia	6	No	No tax at present.
Idaho	5	5	Collected through oil companies.
Illinois	3	3	Collected from licensed distributor and user direct.
Indiana	4	4	Tax on gasoline paid on receipts basis, and charged and payable on sale of Diesel Fuel.
Iowa	3	3	Same as gasoline tax.
Kansas	3	3	Same; collected by distributors, if used in motor vehicles on highways.
Kentucky	5	5	Paid by user if used in motor vehicles on highways.
Louisiana	7	No	No tax at present.
Maine	4	No	No tax at present, and no special legislation.
Maryland	4	4	Same as gasoline tax.
Massachusetts	3	No	Diesels pay higher registration fee.
Michigan	3	3	Same; collected by wholesale distributor.
Minnesota	4	4	Diesel tax charge is made from reports from both seller and purchaser.
Mississippi	6	6	Same if used in motor vehicles on highways.
Missouri	2	2	Same as gasoline tax.
Montana	5	5	Paid by user if used in motor vehicles on highways.
Nebraska	5	No	No diesel fuel tax imposed.
Nevada	4	4	Same as gasoline tax. New legislation contemplated.
New Hampshire	4	4	Same as gasoline tax.
New Jersey	3	3	Same as gasoline tax.
New Mexico	5	7½	Paid by user who must procure license.
New York	4	4	Same as gasoline tax.
North Carolina	6	6	Same as gasoline tax.
North Dakota	3	3	Same as gasoline tax.
Ohio	4	4	Same; collected by dealers.
Oklahoma	4	No	Not subject to a tax.
Oregon	5	5	Diesels also charged higher license fee—Trucks \$1.50 per 100 lb. light weight.
Pennsylvania	4	4	Same if used in motor vehicles on highways.
Rhode Island	3	3	Same as gasoline tax.
South Carolina	6	No	No tax at present.
South Dakota	4	4	Same as gasoline tax.
Tennessee	7	No	Inspection fees on fuels above 16 deg. gravity.
Texas	4	4	Same as gasoline tax.
Utah	4	Special	Diesel vehicles on public highways taxed 1½ cents per operating mile.
Vermont	4	Special	Diesel vehicles charged twice the registration fee.
Virginia	5	5	Same as gasoline tax.
Washington	5	5	Same, plus 50% capacity license fee on gross weight.
West Virginia	5	5	Same as gasoline when used on highways.
Wisconsin	4	4	Same as gasoline tax.
Wyoming	4	4	Same as gasoline tax when used on highways.
FEDERAL	1	No	No tax collected at present.

STATES	8-14	15-24	25-49	50-99	100 or More	Fleets	Trucks
Alabama	130	46	25	12	3	216	5,047
Arizona	42	26	8	7	4	87	3,030
Arkansas	67	27	17	4	5	120	2,997
California	818	382	293	162	149	1,804	83,222
Colorado	145	46	22	18	12	245	7,635
Connecticut	284	121	91	23	22	541	14,298
Delaware	47	21	12	7	4	91	2,166
District of Columbia	81	34	42	21	26	204	76,710
Florida	198	106	58	20	7	389	8,692
Georgia	134	62	41	19	19	275	9,646
Idaho	24	8	5	1	2	40	1,078
Illinois	1,036	410	251	113	101	1,911	82,117
Indiana	469	165	84	33	15	786	17,056
Iowa	213	84	50	12	7	386	7,698
Kansas	164	52	26	11	7	290	5,582
Kentucky	150	60	35	21	11	277	11,355
Louisiana	232	95	50	26	12	415	10,319
Maine	73	29	18	2	6	123	2,809
Maryland	235	96	93	52	28	504	13,100
Massachusetts	736	322	199	82	60	1,399	37,748
Michigan	690	231	185	82	68	1,256	40,267
Minnesota	235	121	80	53	25	415	17,608
Mississippi	42	13	8	4	2	89	1,657
Missouri	401	169	109	51	42	772	24,657
Montana	59	13	14	5	2	93	2,558
Nebraska	110	34	39	13	9	205	7,427
Nevada	15	5	7	2	1	30	690
New Hampshire	45	18	6	4	4	77	2,093
New Jersey	642	270	164	78	54	1,208	33,570
New Mexico	19	7	10	5	2	43	1,527
New York	1,282	588	405	212	192	2,679	146,252
North Carolina	167	71	42	15	9	304	9,482
North Dakota	33	8	7	1	0	49	603
Ohio	731	338	226	102	81	1,478	48,791
Oklahoma	127	73	51	19	17	287	10,252
Oregon	102	38	26	13	6	187	6,451
Pennsylvania	1,195	485	330	127	122	2,229	67,477
Rhode Island	153	35	32	12	6	238	5,109
South Carolina	102	32	23	10	2	169	4,641
South Dakota	34	9	6	1	1	51	905
Tennessee	184	80	52	20	12	348	9,252
Texas	458	174	156	71	41	900	31,385
Utah	64	23	21	10	4	122	35,115
Vermont	18	10	2	6	2	38	2,183
Virginia	208	55	45	23	12	343	9,043
Washington	235	85	53	33	16	422	10,448
West Virginia	132	54	22	12	18	238	7,804
Wisconsin	337	139	87	37	17	617	15,040
Wyoming	28	12	10	2	2	54	1,281
TOTALS	13,126	5,354	3,638	1,669	1,271	25,058	954,302

DIESEL FUEL TAXES

This copyrighted tabulation, comparing gasoline and diesel fuel taxes, together with remarks concerning diesel taxes, has been compiled with the personal cooperation of state authorities directly concerned.

Fleets By Vocations

	Fleets	Trucks
Bakeries, Confectioners, Florists	1,602	61,601
Bottlers, Breweries	905	18,367
Coal Dealers, Mineral Mines	1,076	19,202
Contractors, Builders	2,981	49,180
Dairy Products, Milk, Ice Cream	1,795	63,107
Department Stores, Furniture	489	12,087
Express, Hauling, Inter- and Intra-State and Local	5,376	162,095
Flour, Feed, Grains	153	4,243
Government, State, County, Municipal	1,851	230,374
Ice Dealers and Ice Manufacturers	493	14,191
Laundries, Cleaners, Dyers	1,691	34,967
Manufacturers & Steel Mills	789	11,527
Meats, Fish	686	21,087
Newspapers, Publishers	215	5,125
Oil, Gasoline, Greases	1,333	91,631
Paints, Chemicals, Drugs	192	4,397
Public Utilities, Railroads	1,237	74,248
Vegetables, Farmers, Chain Stores	1,535	39,815
Miscellaneous	659	12,283
TOTALS	25,058	954,302

COMMERCIAL CAR JOURNAL

FLEETS

By Sizes and States

(At Left)

These figures are based on Fleets operating 8 or more TRUCKS. These fleets operate, in addition, over a half million Passenger Cars.

DIESEL ENGINE SPECIFICATIONS

ENGINE MAKE AND MODEL	GENERAL										VALVES				PISTONS			CONNECTING RODS		INJECTION VALVE												
	Type	Number of Cylinders	Bore and Stroke	Piston Displacement (Cu. In.)	Maximum Interim R.P.M.	Maximum Continuous R.P.M.	Compression Ratio	Cycle	Maximum Pressure at Specified R.P.M.	B.M.E.P. at Continuous (Lbs. per Sq. In.)	Weight per Continuous (Lbs.)	Maximum Torque in Lb. Ft. at Specified R.P.M.	Weight Equipped (Lb.)	Arrangement	Intake Port Diameter and Lift (In.)	Exhaust Port Diameter and Lift (In.)	Timing (Degrees)			Material	Length	No. of Rings per Piston	Weight with Rings and Pin (Lb.)	Material	Center to Center Length (In.)	Weight with Cap and Bushing	Valve Type, Open or Closed	Type Orifices—Single, Multiple or Pintle	Injection Pressure (Lbs. per Sq. In.)	Fuel Consumption at Rated Load (Lb. per B. Hp. Hr.)	Starting Method	
																	Intake Opens	Intake Closes	Exhaust Open													Exhaust Closes
Buda	40T-166	AC	4-3 1/2 x 4 1/2	195	50-2400	37-1800	14.5	4	390-600	725	83	25.0	143-1430	925 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-49	2300-49	Ele
Buda	40T-212	AC	4-3 1/2 x 4 1/2	212	52-2300	40-1800	14.5	4	390-600	725	83	25.0	143-1430	955 VI	1.37-486	1.18-486	208	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-49	2300-49	Ele
Buda	60T-278	AC	6-3 1/2 x 4 1/2	278	72-2600	50-1800	14.5	4	390-600	725	83	25.0	143-1430	1253 VI	1.37-486	1.18-486	208	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-284	AC	6-3 1/2 x 4 1/2	294	75-2400	54-1800	14.5	4	390-600	725	84	25.0	143-1430	1253 VI	1.37-486	1.18-486	208	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-317	AC	6-3 1/2 x 4 1/2	317	81-2350	68-1800	14.5	4	390-600	725	84	25.0	143-1430	1353 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-415	AC	6-4 1/2 x 5 1/2	415	87-2000	78-1800	14.2	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-468	AC	6-4 1/2 x 5 1/2	468	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI	1.37-486	1.18-486	209	33AB	488B	13A	AL	4.93	5	3.00	1035	9.50	3.41	C	Pin	2300-47	2300-47	Ele
Buda	60T-488	AC	6-4 1/2 x 5 1/2	488	95-2000	78-1800	12.5	4	390-600	725	79	25.0	143-1430	1413 VI</																		

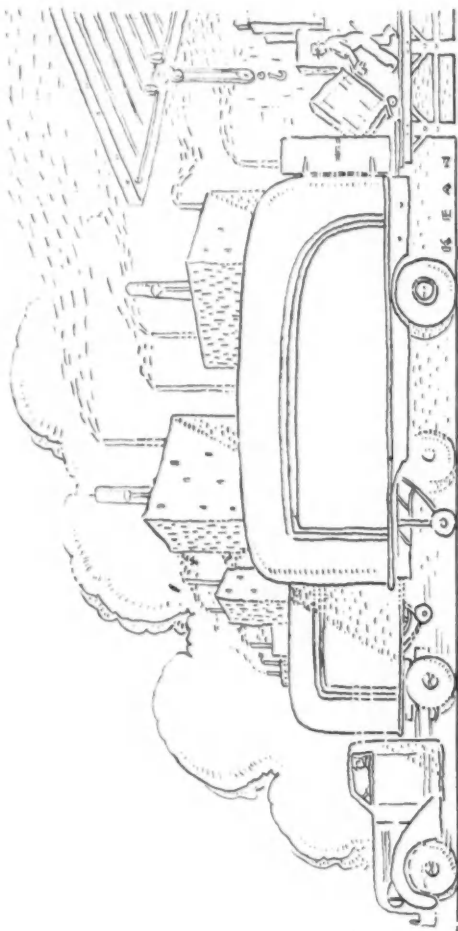
DIESEL FUEL DISTRIBUTION DATA

DIESEL FUEL SPECIFICATIONS

Compiled from Information Submitted by Oil Companies

Final Data

Semi-TRAILER



SPECIFICATIONS

Corrected as of March 1, 1939 from data furnished by Trailer Manufacturers

SEMI-TRAILER MAKE AND MODEL	CHASSIS			TIRE SIZE		FRAME				SPRINGS				BRAKES				AXLE				FIFTH WHEEL (to match standard upper half)												
	Price (f. o. b. factory— see Note)	Maximum Body and Payload Rating (based on Axle Rating)	Chassis Weight (includes weight of items included in Price)	Standard	Maximum Size Recommended	Length		Height (in.)	Side-Rail Size and Type	Drop (in.)	Heat-Treated	No. and Type of Cross-Members	Size	Number Leaves	Shackle Type	Helper Springs	Number of Helper Leaves	Radius Rods	Make, Type and Actuation	Drum Diameter and Width	Drum Material	Brake Lining Area	Automatic Emergency	Make	Maximum Rating (lb.)	Beam Section Dimension	Beam Type	Spindle Diameter (at Inner Bearing)	% Body & Payload on Axle	Landing Gear Type and Actuation	Distance: Kingpin to Front of Frame	Make and Type	Width	Price (lower half)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
TWO-WHEEL																																		
EDWARDS																																		
A-31	780	19400	2600	7.50/20D	8.25/20D	18	Opt	9 1/2 x 2 1/2 x 1 1/2 C	5	N 8C	42x3	11	B	Y	Y	5	Y	BMV	16x2 1/2	CS	174	Y	Tim	10000	4x 1/2	Tu	2 1/2	55	M	Opt	Own	30	75	
A-41	980	24200	3000	8.25/20D	9.75/20D	20	Opt	9 1/2 x 2 1/2 x 1 1/2 C	5	N 8C	42x3	13	B	Y	Y	5	Y	BMV	17 1/2 x 4	CS	290	Y	Tim	13000	4 1/2 x 5/8	Tu	2 1/2	55	M	Opt	Own	30	75	
A-52	1090	29000	3280	9.00/20D	10.50/20D	20	Opt	9 1/2 x 2 1/2 x 1 1/2 C	5	N 8C	42x3	15	B	Y	Y	5	Y	BMV	17 1/2 x 4	CS	290	Y	Tim	15600	5x 1/2	Tu	3 1/2	55	M	Opt	Own	30	75	
A31-VA	840	19400	2910	7.50/20D	8.25/20D	18	Opt	9 1/2 x 2 1/2 x 1 1/2 C	16	N 8C	42x3	11	B	Y	Y	5	Y	BMV	16x2 1/2	CS	174	Y	Tim	10000	4x 1/2	Tu	2 1/2	55	M	Opt	Own	30	75	
A41-VA	1040	24200	3220	8.25/20D	9.75/20D	20	Opt	9 1/2 x 2 1/2 x 1 1/2 C	16	N 7C	42x3	13	B	Y	Y	5	Y	BMV	17 1/2 x 4	CS	290	Y	Tim	13000	4 1/2 x 5/8	Tu	2 1/2	55	M	Opt	Own	30	75	
A52-VA	1155	29000	3590	9.00/20D	10.50/20D	20	Opt	9 1/2 x 2 1/2 x 1 1/2 C	16	N 7C	42x3	15	B	Y	Y	5	Y	BMV	17 1/2 x 4	CS	290	Y	Tim	15500	5x 1/2	Tu	3 1/2	55	M	Opt	Own	30	75	
GENERAL MOTORS																																		
TT-218 (10,000-lb. axle)	525	14000	2215	30x5D	34x7D	16	20	38 1/2 x 4 1/2 x 1 1/2 C	6	N 6C	45x3	9	B	Y	Y	6	Y	BMV	17 1/2 x 3	NI	209	O	Tim	10000	4x 1/2	Tu	2 1/2	57	HM	18	Own-D	27	60	
TT-218 (12,000-lb. axle)	735	17000	2710	34x7D	36x8D	16	20	40 1/2 x 4 1/2 x 1 1/2 C	6	N 6C	45x3	10	B	Y	Y	6	Y	BMV	17 1/2 x 4	NI	279	O	Tim	12000	4 1/2 x 5/8	Tu	2 1/2	57	HM	18	Own-D	27	60	
TT-218H	800	22000	2920	34x7D	9.75/24D	16	20	41 1/2 x 4 1/2 x 1 1/2 C	6	N 6C	45x3	10	B	Y	Y	6	Y	TMV	17 1/2 x 5	NI	347	O	Tim	15000	5x 1/2	Tu	3	53	HM	18	Own-D	33	90	
TT-252	1075	28500	3320	34x7D	10.50/24D	18	22	40 1/2 x 4 1/2 x 1 1/2 C	6	N 6C	46x4	10	B	Y	Y	6	Y	TMV	17 1/2 x 5	NI	347	O	Tim	18000	5x 1/2	Tu	3	53	HM	18	Own-D	33	90	
GRAMM																																		
DF-40	745	18000	3150	7.00/20D	8.25/20D	20	24	38 1/2 x 4 1/2 x 1 1/2 C	5	N 7C	51x3	12	S	Y	Y	7	Y	TMV	17 1/2 x 3	CN	214	Y	Tim	11000	4 1/2 x 1/2	Tu	2 1/2	60	HM	15	Var-D	30	80	
DF-75	945	22000	3350	8.25/20D	9.00/20D	20	24	40 1/2 x 4 1/2 x 1 1/2 C	5	N 7C	51x3	13	S	Y	Y	8	Y	TMV	17 1/2 x 4	CN	284	Y	Tim	13000	4 1/2 x 5/8	Tu	2 1/2	60	HM	15	Var-D	33	90	
DF-85	1165	27000	3750	9.00/20D	10.50/20D	20	24	41 1/2 x 4 1/2 x 1 1/2 C	5	N 7C	51x3	14	S	Y	Y	9	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	15000	5x 1/2	Tu	3 1/2	60	HM	15	Var-D	33	90	
DF-95	1465	32000	4050	10.50/20D	11.25/20D	20	24	43 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	10	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	18000	5x 1/2	Tu	3 1/2	60	HM	15	Var-D	33	90	
DF-105	1885	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-115	1985	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-125	2085	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-135	2185	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-145	2285	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-155	2385	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-165	2485	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-175	2585	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-185	2685	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-195	2785	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-205	2885	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-215	2985	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-225	3085	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-235	3185	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-245	3285	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-255	3385	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-265	3485	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-275	3585	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-285	3685	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-295	3785	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-305	3885	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-315	3985	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-325	4085	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-335	4185	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-345	4285	42000	4350	11.25/20D	12.00/20D	20	24	45 1/2 x 4 1/2 x 1 1/2 C	6	N 7C	51x3	15	S	Y	Y	12	Y	TMV	17 1/2 x 5	CN	356	Y	Tim	25000	6x 1/2	Tu	3 1/2	60	HM	16	Var-D	33	90	
DF-355	4385	42000	4350	11.25/20D																														

1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
DF-86	1285	27000	3750	9.00/20D	10.50/20D	10.50/20D	20	22	34	10 1/2x23 1/2x3 1/2 C	14	N 7C	52x3	15 S	Y	9	Y	9	Y	9	17 1/2x5	CN	356	Y	Tim	15000	5 1/2x5	3 1/2	Tu	3 1/2	60	HM	15	Var-D	33	90		
DF-96	1665	4060	4060	10.50/20D	11.25/20D	11.25/20D	20	22	36	10 1/2x23 1/2x3 1/2 C	14	N 7C	52x3	15 S	Y	9	Y	9	Y	9	17 1/2x5	CN	356	Y	Tim	18000	5 1/2x5	3 1/2	Tu	3 1/2	60	HM	15	Var-D	33	90		
DF-106	1805	42000	4350	11.25/20D	12.00/20D	12.00/20D	20	22	38	10 1/2x23 1/2x3 1/2 C	14	N 7C	52x3	17 S	Y	12	Y	12	Y	12	17 1/2x5	CN	356	Y	Tim	25000	6 1/2x5		Tu		60	HM	15	Var-D	33	90		
HIGHWAY																																						
78-A	637	16000	2100	6.00/20D	7.50/20D	7.50/20D	16	24	40 1/2	9 1/2x23 1/2x3 1/2 C	5	N 4C3J	3x46	9 S	Y	5	Y	5	Y	5	16x2 1/2	G	176	O	Own	9000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
78-B	797	28000	2480	7.00/20D	8.25/20D	8.25/20D	18	24	41 1/2	9 1/2x23 1/2x3 1/2 C	5	N 4C3J	3x46	11 S	Y	6	Y	6	Y	6	17 1/2x5	G	216	O	Own	12000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
78-C	1022	28000	3240	8.25/20D	9.75/20D	9.75/20D	18	24	44 1/2	10 1/2x23 1/2x3 1/2 C	5	N 4C3J	3x46	12 S	Y	6	Y	6	Y	6	17 1/2x5	G	288	O	Own	18000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	30	90			
78-D	1257	32000	3960	9.00/20D	10.50/20D	10.50/20D	20	24	47 1/2	12 1/2x23 1/2x3 1/2 C	5	N 6C1J	3x46	15 S	Y	6	Y	6	Y	6	16x2 1/2	G	176	O	Own	9000	2 1/2x3 1/2	Re	2 1/2	56	AM	15	Mar-D	30	125			
88-A	1800	16000	2700	6.00/20D	7.50/20D	7.50/20D	16	24	40 1/2	9 1/2x23 1/2x3 1/2 C	5	N 6C1J	3x46	11 S	Y	6	Y	6	Y	6	17 1/2x5	G	216	O	Own	12000	2 1/2x3 1/2	Re	2 1/2	56	AM	15	Mar-D	30	125			
88-B	2200	3600	3665	7.00/20D	8.25/20D	8.25/20D	18	24	41 1/2	9 1/2x23 1/2x3 1/2 C	5	N 6C1J	3x46	12 S	Y	6	Y	6	Y	6	17 1/2x5	G	288	O	Own	18000	2 1/2x3 1/2	Re	2 1/2	56	AM	15	Mar-D	30	125			
88-C	2800	3960	3960	8.25/20D	9.75/20D	9.75/20D	18	24	44 1/2	10 1/2x23 1/2x3 1/2 C	5	N 6C1J	3x46	15 S	Y	6	Y	6	Y	6	16x2 1/2	G	350	O	Own													
88-D	3200	4500	4500	9.00/20D	10.50/20D	10.50/20D	18	24	47 1/2	12 1/2x23 1/2x3 1/2 C	5	N 6C1J	3x46	18 S	Y	6	Y	6	Y	6	16x2 1/2	G	422	O	Own													
106-A	777	16000	2135	6.00/20D	7.50/20D	7.50/20D	16	24	31 1/2	7 1/2x23 1/2x3 1/2 C	18	N 4C2J	3x46	9 S	Y	5	Y	5	Y	5	16x2 1/2	G	176	O	Own	9000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
106-B	932	22000	2570	7.00/20D	8.25/20D	8.25/20D	18	24	32 1/2	7 1/2x23 1/2x3 1/2 C	18	N 4C2J	3x46	11 S	Y	6	Y	6	Y	6	17 1/2x5	G	216	O	Own	12000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
106-C	1157	28000	3300	8.25/20D	9.75/20D	9.75/20D	18	24	33 1/2	7 1/2x23 1/2x3 1/2 C	18	N 4C2J	3x46	12 S	Y	6	Y	6	Y	6	17 1/2x5	G	288	O	Own	18000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	30	90			
106-D	1402	32000	3950	9.00/20D	10.50/20D	10.50/20D	18	24	36	10 1/2x23 1/2x3 1/2 C	18	N 4C2J	3x46	15 S	Y	6	Y	6	Y	6	16x2 1/2	G	350	O	Own													
118-A	902	25000	3125	6.50/20D	8.00/20D	8.00/20D	16	24	31 1/2	7 1/2x23 1/2x3 1/2 C	18	N 4C3J	3x46	9 S	Y	5	Y	5	Y	5	16x2 1/2	G	176	O	Own	9000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
118-B	922	26000	3200	7.00/20D	8.50/20D	8.50/20D	16	24	32 1/2	7 1/2x23 1/2x3 1/2 C	18	N 4C3J	3x46	11 S	Y	6	Y	6	Y	6	17 1/2x5	G	216	O	Own	12000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
118-C	1132	26000	3675	8.00/20D	9.50/20D	9.50/20D	18	24	38	10 1/2x23 1/2x3 1/2 C	18	N 4C3J	3x46	12 S	Y	6	Y	6	Y	6	17 1/2x5	G	288	O	Own	18000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	30	90			
118-D	1282	32000	3975	9.00/20D	10.50/20D	10.50/20D	18	24	39 1/2	10 1/2x23 1/2x3 1/2 C	18	N 6C2J	3x46	15 S	Y	6	Y	6	Y	6	16x2 1/2	G	350	O	Own													
128-A	602	16000	2260	6.00/20D	7.50/20D	7.50/20D	16	24	31 1/2	7 1/2x23 1/2x3 1/2 C	18	N 6C2J	3x46	9 S	Y	5	Y	5	Y	5	16x2 1/2	G	176	O	Own	9000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
128-B	957	22000	2515	7.00/20D	8.25/20D	8.25/20D	16	24	32 1/2	7 1/2x23 1/2x3 1/2 C	18	N 6C2J	3x46	11 S	Y	6	Y	6	Y	6	17 1/2x5	G	216	O	Own	12000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	24	69			
128-C	1167	28000	3470	8.25/20D	9.75/20D	9.75/20D	18	24	33 1/2	10 1/2x23 1/2x3 1/2 C	18	N 7C2J	3x46	12 S	Y	6	Y	6	Y	6	17 1/2x5	G	288	O	Own	18000	2 1/2x3 1/2	Re	2 1/2	56	HM	15	Mar-D	30	90			
128-D	1317	32000	3645	9.00/20D	10.50/20D	10.50/20D	18	24	36	10 1/2x23 1/2x3 1/2 C	18	N 7C2J	3x46	15 S	Y	6	Y	6	Y	6	17 1/2x5	G	350	O	Own													
KINGHAM																																						
H-30	660	16500	2500	32x6D	34x7D	34x7D	18	30	46	10 1/2x23 1/2x3 1/2 C	6	N 7C	46x3 1/2	12 S	Y	5	Y	5	Y	5	17 1/2x4	CN	272	Y	Own	12000	4 1/2x5	Tu	2 1/2	55	HM	16	Own	30	60			
HD-30	785	25000	2860	32x6D	36x8D	36x8D	18	30	47	10 1/2x23 1/2x3 1/2 C	6	N 7C	46x3 1/2	15 S	Y	5	Y	5	Y	5	17 1/2x4	CN	340	Y	Own	15000	4 1/2x5	Tu	2 1/2	55	HM	16	Own	30	60			
H-40	1045	29300	3200	34x7D	38x9D	38x9D	20	30	49	10 1/2x23 1/2x3 1/2 C	6	N 7C	46x3 1/2	15 S	Y	5	Y	5	Y	5	17 1/2x4	CN	340	Y	Own	18000	5 1/2x5	Tu	3	55	HM	16	Own	36	85			
MACK																																						
ST-20	890	20000	3000	6.25/20D	9.00/20D	9.00/20D	18	24	40	9 1/2x23 1/2x3 1/2 C	5	N 7C	54x3	7 R	Y	4	N	OMV	17 1/2x4	CN	242	Y	T															
ST-30	1080	25000	3500	9.00/20D	9.75/22D	9.75/22D	18	24	44	9 1/2x23 1/2x3 1/2 C	5	N 7C	54x3	9 R	Y	6	N	OMV	17 1/2x4	CN	356	Y	T															
8-12S	1600	37000	4700	9.75/20D	11.25/24D	11.25/24D	18	24	48	11 1/2x23 1/2x3 1/2 C	6	N 7C	52x4	9 R	Y	8	N	OMV	17 1/2x6	CN	428	Y	T															
8-12SD	1825	35000	5100	9.75/20D	11.25/24D	11.25/24D	18	24	34	10 1/2x23 1/2x3 1/2 C	18	N 7C	52x4	9 R	Y	8	N	OMV	17 1/2x6	CN	428	Y	T															
TRUCK ENGINEERING																																						
25F	655	16000	2400	7.00x20D	8.25x20D	8.25x20D	16	22	39	8x21 1/2x3 1/2 C	5	N 7C	45x2 1/2	14 B	Y	9	O	TMV	16x3 1/2	AI	210	Y	Tim	11000	4 1/2x5 1/2	Tu	2 1/2	57	HM	15	Own-D	30	75					
35F	835	20000	2800	7.50x20D	9.00x20D	9.00x20D	16	24	41	10x21 1/2x3 1/2 C	5	N 7C	46x3	15 R	Y	5	O	TMV	17 1/2x4	AI	284	Y	Tim	13000	4 1/2x5 1/2	Tu	2 1/2	57	HM	15	Own-D	30	75					
45F	1080	25000	3500	9.00x20D	9.75x20D	9.75x20D	18	26	42	10x21 1/2x3 1/2 C	5	N 8C	50x3	17 B	Y	6	O	TMV	17 1/2x4	AI	356	Y	Tim	16000	5 1/2x5 1/2	Tu	3 1/2	58	HM	15	Own-D	33	100					
55F	1295	26000	4000	9.75x20D	11.25x24D	11.25x24D	18	28	43 1/2	10x21 1/2x3 1/2 C	5	N 8C	50x3 1/2	17 B	Y	7	O	TMV	17 1/2x5	AI	356	Y	Tim	18000	5 1/2x5 1/2	Tu	3 1/2	58	HM	15	Own-D	33	150					
FOUR-WHEEL SEMIS																																						
EDWARDS																																						
C-31	1360	36200	3750	7.50/20D	8.25/20D	8.25/20D	20	20	Ont	9 1/2x21 1/2x3 1/2 C	5	N 10C	38x3	10* B	N	Y	BMV	16x2 1/2	CS	348	Y	Tim	20000	4 1/2x5	Tu	2 1/2	70	M	Opt	Own	30	75						
C-41	1805	45800	4250	8.25/20D	9.75/20D	9.75/20D	20	20	Ont	9 1/2x21 1/2x3 1/2 C	5	N 10C	38x3	11* B	N	Y	BMV	17 1/2x4	CS	560	Y	Tim	26000	4 1/2x5 1/2	Tu	2 1/2	70	M	Opt	Own	30	75						
C-52	1955	55500	4650	9.00/20D	10.50/20D	10.50/20D	22	20	Ont	9 1/2x21 1/2x3 1/2 C	5	N 10C	38x3	12* B	N	Y	BMV	17 1/2x4	CS	560	Y	Tim	31200	5 1/2x5 1/2	Tu	3 1/2	70	M	Opt	Own	30	75						
GENERAL MOTORS																																						
TT-218W (10,000-lb. axles)	1325	24400	3915	32x6D	34x7D	34x7D	20	24	38 1/2	8 1/2x13 1/2x3 1/2 C	6	N 7C	40x3*	9 B	Y	6	Y	BMV	17 1/2x4	NI	418	O	Tim	20000	4 1/2x5	Tu	2 1/2	68 1/2	HM	18	Own-D	33	90					
TT-218W (12,000-lb. axles)	1575	29700	4465	34x7D	36x8D	36x8D	20	24	40 1/2	8 1/2x13 1/2x3 1/2 C	6	N 7C	40x3*	10 B	Y	6	Y	BMV	17 1/2x4	NI	567	O	Tim	24000	4 1/2x5 1/2	Tu	2 1/2	68 1/2	HM	18	Own-D	33	90					
KINGHAM																																						
H30T	1095	24000	3200	32x6D	34x7D	34x7D	18	30	50	10 1/2x23 1/2x3 1/2 C	6	N 7C	44x3 1/2	11 B	N	N	N	OMV	17 1/2x4	CN																		

* Four springs	COLUMN 10	COLUMN 16	COLUMN 17	COLUMN 28	COLUMN 31	COLUMN 33
ABBREVIATIONS:	Channel I-I Beam	B Bushed R Rubber block	G Gravity	Ch-Chrome Nickel-iron	Cla-Clark Own-Own	ASF American Steel Foundry
N-No O-Optional Y-Yes	J-Jaw T-Tubular	Makes: B-Bendix L-Loekheed	H-Hydraulic M-Mechanical V-Vacuum	G-Guide NI-Nickel iron	Tim-Timken	Aus-Austin Re-Restaurular
						Ma-Martin D-Detachable
						Own-Own Var-Varies
						SE-Standard Equipment, to extra charge

Column 2 gives the price of the chassis, f.o.b. factory. The price includes the following: standard length chassis; standard tires; power brakes; landing gear; tail and stop light; upper half of fifth wheel, and brake and electrical connections and fittings that are considered part of the trailer's equipment.

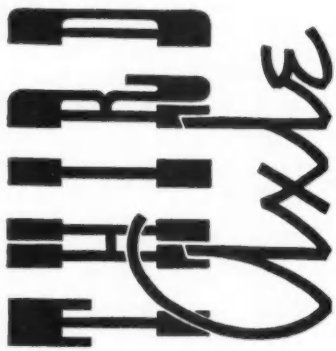
Column 3. The maximum body and payload rating of the semi-trailer is based on the axle rating in Column 26.

Column 4. Weight of complete chassis includes weight of items included in price in the ground to top of frame over the rear axle with standard size tires, loaded.

Column 35. The price of the fifth wheel, lower half, is f.o.b. factory. It does not include mounting.

Column 8 gives the longest frame length available as a standard option at extra cost. Special lengths longer than the longest standard length are available also at extra cost.

Column 9. Frame height is the distance from



SPECIFICATIONS

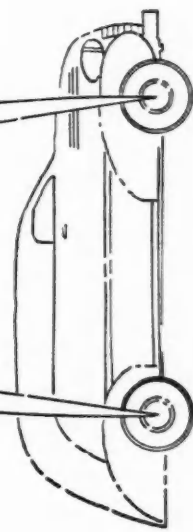
THIRD AXLE MAKE AND MODEL and Truck Model adapted to		Capacity (Lb.) See Explanatory Notes	Price (f. o. b. factory)	Weight (Lb.) with Max. Tires, Frame Extension, Etc.	Maximum Tire Size	LOAD DIS- TRIBUTION RANGE		Axle Spacing (with maximum tires)	AXLE DATA			BRAKES (Standard)					Sproing Size or Number	Sproing Added (at inner bearing)
						Type	Size		Make and Type	Drum Material	Brake Diameter and Width	Lining Area	Number of Points or Frame Support					
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Trailing Axles																		
FARGO																		
147 (Ford)		11000	390	2000	34x7	53-47	50-50	42	Tim	T	4 1/2	LH	CA	15x3 1/2	192	2	48x2 1/2	2 1/2
147 (Chevrolet)		11000	390	2000	34x7	53-47	50-50	42	Tim	T	4 1/2	LH	CA	15x3 1/2	192	2	48x2 1/2	2 1/2
215 (All other makes)		11000	475	3000	34x7	53-47	50-50	48	Tim	T	4 1/2	LH	CA	16x3 1/2	205	2	48x2 1/2	2 1/2
330 (All other makes)		13000	550	3000	9.75/20	50-50	50-50	48	Tim	T	4 1/2	LH	CA	16x3 1/2	205	2	55x3	2 1/2
GRIGIO																		
(Ford 1 1/2)		10000	600	5500	8.25/20	50-50	50-50	42 1/2	Tim	T	4 1/2	FH	CA	16x3 1/2	0	42 1/2	42 1/2	2 1/2
LITTLE GIANT																		
8-ton (For any 1 1/2 ton truck)		12000	308	1200	2x6	50-50	50-50	42	Own	Sr	2 1/2	BHV	CA	18x2 1/2	167	6	22x2 1/2	2 1/2
8-ton (For any 1 1/2 ton truck)		16000	461	1575	34x7	50-50	50-50	42	Shu	Sq	2 1/2	BHV	CA	18x2 1/2	167	4	42x2 1/2	2 1/2
8-ton (For any 2 ton truck)		16000	575	2000	8.25/20	50-50	50-50	42	Shu	Sq	2 1/2	BHV	CA	18x3	180	4	42x3	2 1/2
10-ton (For any 2 1/2 to 3 ton truck)		20000	695	2410	9.75/20	50-50	50-50	44	Shu	Bq	4	BHV	CA	17x4	250	4	44x3 1/2	2 1/2
PERFECTION																		
HDF (Ford)		10000	380	1804	32x6-10	50-50	50-50	42	Own	Sr	2 1/2	BM	CI	16x2 1/2	167	2	42x3	2 1/2
HDC (Chevrolet)		10000	440	1824	32x6-10	50-50	50-50	42	Own	Sr	2 1/2	BMV	CI	16x2 1/2	167	2	42x3	2 1/2
TIMKEN																		
SBT-800-H (Brookway 78, 87, 90X; Diamond T 404; Dodge TF35; Federal 14, 15, 18; GMC AC300, AC350, AC400, AC450; Indiana 86; Mack EE; Studebaker K15, K15N; White 700)		8000		1910	7.50/20	53-47	50-50	44	Tim	T	3 1/2	LHV	CA	15x3 1/2	206	1	48x2 1/2	2 1/2
ST-732-H (Ford 1 1/2)		8000		1674	32x6-10	53-47	50-50	44	Tim	T	3 1/2	LHV	CA	16x3 1/2	206	1	48x2 1/2	2 1/2
ST-742-H (Chevrolet 1 1/2)		8000		1681	32x6-10	53-47	50-50	44	Tim	T	3 1/2	LHV	CA	16x3 1/2	206	1	48x2 1/2	2 1/2
TRUCKTOR (3)																		
HLF (Ford 1 1/2)		8800	432	1750	32x6-10	50-50	60-40	41	Own	Sr	3	LHV	CA	15x3 1/2	234	6	33 1/2x2 1/2	2 1/2
HLC (Chevrolet 1 1/2)		8800	432	1750	32x6-10	50-50	60-40	41	Own	Sr	3	LHV	CA	15x3 1/2	234	6	33 1/2x2 1/2	2 1/2
HLD (Dodge 1 1/2)		8800	432	1750	32x6-10	50-50	60-40	41	Own	Sr	3	LHV	CA	15x3 1/2	234	6	33 1/2x2 1/2	2 1/2
HLL (Light truck tires to 34x7 inclusive)		11000	557	1895	34x7	50-50	60-40	45	Own	Sr	3	LHV	CA	15x2 1/2	132	6	38 1/2x2 1/2	2 1/2
HLR (Medium truck tires to 9.75/20 inclusive)		16000	999	2553	9.75/20	50-50	60-40	52	Own	Sr	3 1/2	LHV	CA	15x3 1/2	235	6	47x3 1/2	2 1/2
HR (Heavy truck tires above sizes listed)		21000	1218	3177	10.50/24	50-56	60-40	52	Own	Sr	4	LHV	CA	17 1/4x4	251	6	47x3 1/2	2 1/2
TRUXMOKE																		
22 (Ford)		8800	475	2250	32x6-10	55-45	65-35	42	Own	Sq	2 1/2	LHV	CA	16x2 1/2	179	4	..	2 1/2
24 (All makes)		2800	488	2250	32x6-10	52-48	55-35	44	Own	Sq	2 1/2	LHV	CA	16x2 1/2	179	4	..	2 1/2
26 (All makes)		10200	531	2400	32x7	52-48	65-35	44	Own	Sq	2 1/2	LHV	CA	15x3 1/2	234	4	..	2 1/2
27 (All makes)		10600	727	2500	8.25/20	52-48	65-35	46	Own	Sq	3	LHV	CA	16x3 1/2	218	4	..	2 1/2
31 (All makes)		13000	847	3100	9.00/20	50-50	60-40	46	Own	Sq	3	LHV	CA	16x3 1/2	218	4	..	2 1/2
33 (All makes)		13000	882	3200	9.00/20	50-50	60-40	46	Own	Sq	3	LHV	CA	16x3 1/2	218	4	..	2 1/2
36 (All makes)		14000	986	3300	9.00/20	50-50	60-40	46	Own	Sq	3 1/2	LHV	CA	17 1/4x4	251	4	..	2 1/2
39 (All makes)		15600	977	3500	9.75/20	50-50	65-35	51	Own	Sq	3 1/2	LHV	CA	17 1/4x5	314	4	..	2 1/2
44 (All makes)		20000	1149	3800	10.50/22	50-50	55-35	51	Own	Sq	3 1/2	LHV	CA	17 1/4x5	314	4	..	2 1/2
UTILITY																		
15 (For any 1 1/2 ton truck)		7500	313	900	7.00/20	55-45	66-33	40	Own	Sq	2 1/2	SM	CA	15x2 1/2	152	4	None	2 1/2
25 (For any 2 ton truck)		9000	419	1100	7.50/20	55-45	66-33	41	Own	Sq	2 1/2	OMV	CA	16x3 1/2	210	4	None	2 1/2
35 (For any 3 1/2 ton truck)		13000	690	1600	9.00/20	55-45	66-33	44	Own	Sq	3 1/2	OMV	CA	17x4	254	4	None	2 1/2
35 (For any 5 ton truck)		18000	799	1500	10.50/24	55-45	66-33	50	Own	Sq	3 1/2	OMV	CA	17x4	254	4	None	2 1/2
Driving Axles																		
FARGO																		
427 (Ford)		10000	1035	2400	34x7	50-50	50-50	44	Ford	D	..	FH	CA	15x3 1/2	192	2	43x2 1/2	2 1/2
427 (Chevrolet)		10000	1035	2400	34x7	50-50	50-50	44	Ford	D	..	CH	CA	15x3	176	2	43x2 1/2	2 1/2
GRIGIO																		
(Ford 1 1/2)		10000	1079	6200	8.25/20	50-50	50-50	42 1/2	Ford	D	..	FH	CA	14x2 1/2	175	0	42 1/2	2 1/2
(Chevrolet 1 1/2)		10000	1079	6100	8.25/20	50-50	50-50	42 1/2	Ford	D	..	CH	CA	14x2 1/2	214	0	42 1/2	2 1/2
F (All other makes)		11000	1340	(V)	8.25/20	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3 1/2	353	0	42 1/2	3 1/2
THORNTON TANDEM																		
AF26F (Ford)		11000	948	6600	34x7	50-50	50-50	42	Ford	D	..	LH	CA	15x3 1/2	190	3	42x2 1/2	2 1/2
AF26F (Chevrolet)		11000	957	6760	34x7	50-50	50-50	42	Ford	D	..	LH	CA	15x3 1/2	193	3	42x2 1/2	2 1/2
AF29E (Ford)		12750	1163	7220	34x7	50-50	50-50	42	Eaton	D	..	LH	CA	15x3 1/2	193	3	42x2 1/2	2 1/2
AF30E (Ford)		12750	1205	7380	34x7	50-50	50-50	42	Eaton	D	..	LH	CA	15x3 1/2	193	3	42x2 1/2	2 1/2
AC26C (Chevrolet)		11000	929	6175	34x7	50-50	50-50	42	Chev	D	..	LH	CA	16x3	218	4	42x2 1/2	2 1/2
AC27C (Chevrolet)		11000	938	6895	34x7	50-50	50-50	42	Chev	D	..	LH	CA	16x3	218	4	42x2 1/2	2 1/2
AC27C (Chevrolet)		13000	1450	8995	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
AC30T (Chevrolet)		13000	1458	7410	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
AC30T (Chevrolet)		13000	1458	7410	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
AC30T (Chevrolet)		13000	1458	7410	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
(All other makes)		11000	1485	6800	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
AH26T (All other makes)		11000	1517	7760	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
AH30T (All other makes)		13000	1517	7760	34x7	50-50	50-50	42 1/2	Tim	D	..	LH	CA	16x3	175	4	42x2 1/2	2 1/2
(All other makes)		15000	1742	8967	9.00/20	50-50	50-50	42 1/2	Tim	D	..	LH	CA	18 1/4x4 1/2	216	4	42x2 1/2	2 1/2
AH40T (All other makes)		15000	1742	8967	9.00/20	50-50	50-50	42 1/2	Tim	D	..	LH	CA	18 1/4x4 1/2	216	4	42x2 1/2	2 1/2

COMMERCIAL CAR JOURNAL'S

TRUCK

SPECIFICATIONS

Table



Brought up to date in this issue from data supplied by truck manufacturers

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Make and Model—Only basic models with most manufacturers.

Tonnage Rating—Where a spread of ratings is given the maximum rating is the one to be used. Where only one rating is given, that is the one to be used. The minimum for extremely difficult conditions; the ranges between are for varying operating conditions.

Chassis Price—Chassis price quoted applies to standard wheelbase with standard tires. All prices are F.O.B. factory.

Gross Vehicle Weight—Is chassis weight stripped, plus body and cab weight, plus payload. Gross vehicle weight is based on maximum recommended tire size, not on tires listed as standard.

Chassis Weight Stripped—Is weight of standard chassis with standard equipment, with crankcase and engine in place, but without body or cab. Exceptions are noted.

Maximum Tire Size—Is furnished at standard tire size. Dual rear axle trucks are noted except where otherwise noted.

Maximum Brake HP. at Given R.P.M.—Is actual dynamometer reading without accessories.

Gear Ratio Range in High—Ratios in high gear range are available at no extra cost. Exceptions are noted.

Tractors—Unless given the designation "tractor," all standard models may be assumed to be available as tractors.

(C) Converted Ford, or Chevrolet model identifiable by the engine make listed.

(D)—Diesel equipped.

(N)—Not available as tractor.

(T)—Specifically designed for tractor use only.

c.f.—Cab-Forward

c.o.e.—Cab-over-engine design.

e.b.s.—Engine-between-seat design

e.u.s.—Engine-under-seat design

(1) Autocar—Larger service brake areas on rear axles are provided when tires of 24" base are supplied.

(2) Price does not include auxiliary axle. Chassis weight includes auxiliary axle complete; area of brake lining and drum area do not include auxiliary rear axle.

(3) Models intended for dump or tractor service only.

(4) Chevrolet—Governor set not to exceed 45 M.P.H.

(5) These models available with double drop box frames.

(6) Ford—5.83 axle ratio, plus optional at no extra charge. 2-speed axle (ratio of 5.83 and 5.11) optional at extra cost.

MAKES—ALL

A—American La France.
B—Bendix.
C—Caterpillar.
D—Deere.
E—Eaton.
F—Ford.
G—General Motors.
H—Hercules.
I—International.
J—Jaworowski.
K—Kaiser.
L—Lockheed.
M—Mack.
N—New Process.
O—Owens-Illinois.
P—Packard.
Q—Quincy.
R—Reo.
S—Salsbury.
T—Timken.
U—Union City.
V—Vulcan.
W—Waukesha.
X—Xcel.
Y—Yale.
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BRAKE DRUMS

Material

A—American Car Ferry.
B—Bendix.
C—Caterpillar.
D—Deere.
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F—Ford.
G—General Motors.
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FRAME

Type

A—American Car Ferry.
B—Bendix.
C—Caterpillar.
D—Deere.
E—Eaton.
F—Ford.
G—General Motors.
H—Hercules.
I—International.
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GOVERNOR STANDARD

Y—Yes. N—No

REAR AXLE

Final Drive and Type

A—American Car Ferry.
B—Bendix.
C—Caterpillar.
D—Deere.
E—Eaton.
F—Ford.
G—General Motors.
H—Hercules.
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Drive and Torque

A—American Car Ferry.
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Y—Yale.
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WHEELS DRIVEN

A—American Car Ferry.
B—Bendix.
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D—Deere.
E—Eaton.
F—Ford.
G—General Motors.
H—Hercules.
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W—Waukesha.
X—Xcel.
Y—Yale.
Z—Zodiac.

[illegible]

Model	Price	Weight	Capacity	Speed	Range	Consumption	Notes
1931	1000	1000	1000	1000	1000	1000	
1932	1000	1000	1000	1000	1000	1000	
1933	1000	1000	1000	1000	1000	1000	
1934	1000	1000	1000	1000	1000	1000	
1935	1000	1000	1000	1000	1000	1000	
1936	1000	1000	1000	1000	1000	1000	
1937	1000	1000	1000	1000	1000	1000	
1938	1000	1000	1000	1000	1000	1000	
1939	1000	1000	1000	1000	1000	1000	
1940	1000	1000	1000	1000	1000	1000	
1941	1000	1000	1000	1000	1000	1000	
1942	1000	1000	1000	1000	1000	1000	
1943	1000	1000	1000	1000	1000	1000	
1944	1000	1000	1000	1000	1000	1000	
1945	1000	1000	1000	1000	1000	1000	
1946	1000	1000	1000	1000	1000	1000	
1947	1000	1000	1000	1000	1000	1000	
1948	1000	1000	1000	1000	1000	1000	
1949	1000	1000	1000	1000	1000	1000	
1950	1000	1000	1000	1000	1000	1000	
1951	1000	1000	1000	1000	1000	1000	
1952	1000	1000	1000	1000	1000	1000	
1953	1000	1000	1000	1000	1000	1000	
1954	1000	1000	1000	1000	1000	1000	
1955	1000	1000	1000	1000	1000	1000	
1956	1000	1000	1000	1000	1000	1000	
1957	1000	1000	1000	1000	1000	1000	
1958	1000	1000	1000	1000	1000	1000	
1959	1000	1000	1000	1000	1000	1000	
1960	1000	1000	1000	1000	1000	1000	
1961	1000	1000	1000	1000	1000	1000	
1962	1000	1000	1000	1000	1000	1000	
1963	1000	1000	1000	1000	1000	1000	
1964	1000	1000	1000	1000	1000	1000	
1965	1000	1000	1000	1000	1000	1000	
1966	1000	1000	1000	1000	1000	1000	
1967	1000	1000	1000	1000	1000	1000	
1968	1000	1000	1000	1000	1000	1000	
1969	1000	1000	1000	1000	1000	1000	
1970	1000	1000	1000	1000	1000	1000	
1971	1000	1000	1000	1000	1000	1000	
1972	1000	1000	1000	1000	1000	1000	
1973	1000	1000	1000	1000	1000	1000	
1974	1000	1000	1000	1000	1000	1000	
1975	1000	1000	1000	1000	1000	1000	
1976	1000	1000	1000	1000	1000	1000	
1977	1000	1000	1000	1000	1000	1000	
1978	1000	1000	1000	1000	1000	1000	
1979	1000	1000	1000	1000	1000	1000	
1980	1000	1000	1000	1000	1000	1000	
1981	1000	1000	1000	1000	1000	1000	
1982	1000	1000	1000	1000	1000	1000	
1983	1000	1000	1000	1000	1000	1000	
1984	1000	1000	1000	1000	1000	1000	
1985	1000	1000	1000	1000	1000	1000	
1986	1000	1000	1000	1000	1000	1000	
1987	1000	1000	1000	1000	1000	1000	
1988	1000	1000	1000	1000	1000	1000	
1989	1000	1000	1000	1000	1000	1000	
1990	1000	1000	1000	1000	1000	1000	
1991	1000	1000	1000	1000	1000	1000	
1992	1000	1000	1000	1000	1000	1000	
1993	1000	1000	1000	1000	1000	1000	
1994	1000	1000	1000	1000	1000	1000	
1995	1000	1000	1000	1000	1000	1000	
1996	1000	1000	1000	1000	1000	1000	
1997	1000	1000	1000	1000	1000	1000	
1998	1000	1000	1000	1000	1000	1000	
1999	1000	1000	1000	1000	1000	1000	
2000	1000	1000	1000	1000	1000	1000	

1 Rear 32 x 6. 11 Rear 7.50/16. (x) Delivered at Factory Price. Includes all Federal Taxes but does not include any state and/or local taxes. (*) Price includes chassis & cab. (E) For export only. † Denotes New Models or Change in Specifications. ‡ Dart—Any length wheelbase available at no extra cost. Chevrolet—(A) Gross veh. weight, 8,000 lbs. weight—two speed rear axle with special tire equipment available at extra cost. (b) Gross veh. weight, 14,000 lbs. when truck is equipped with two-speed rear axle and special tire equipment at extra cost. (c) Rear tire size, both standard and maximum, 32 x 6—8 ply. (d) 32 x 6—10 ply or 7.50/20—8 ply.

Line Number	MAKE AND MODEL	GENERAL (See Keynote)			TIRE SIZES		ENGINE DETAILS				TRANSMISSION		REAR AXLE		FRONT AXLE		BRAKES			C-A Dimension (Std. W. B.)	Side Rail Dimensions	Type										
		Tonnage Rating	Standard Wheelbase	Gross Weight with Max. W. B. Furnished	Chassis Wt. (Stripped)	Dual rear S-single rear	Maximum Tire Size	Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Max. Brake H.P. at R.P.M.	Number and Length of Main Bearings	Governor Standard	Make and Model	Gear and Type	Drive & Torque	Gear Ratio	Range in High				Make and Model	Location	Operation	Lining Area	Drum Area	Drum Material	Hand Location			
1	Ford (E) FKH-1	404	116	116	4' 50"	6.00 16S	6.00 16S	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36700	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	40
2	Ford (E) FKH-2	594	123	133	5' 00"	7.00 20	7.00 20	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	44 1/2
3	Ford (E) FKH-3	818	126	130	5' 00"	7.00 20	7.00 20	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	51 1/2
4	Ford (E) FKH-4	950	182	182	5' 00"	7.50 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
5	Ford (E) FKH-5	1170	136	220	5' 00"	7.50 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
6	Ford (E) FKH-6	1472	116	116	4' 50"	6.00 16S	6.00 16S	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
7	Ford (E) FKH-7	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
8	Ford (E) FKH-8	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
9	Ford (E) FKH-9	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
10	Ford (E) FKH-10	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
11	Ford (E) FKH-11	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
12	Ford (E) FKH-12	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
13	Ford (E) FKH-13	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
14	Ford (E) FKH-14	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
15	Ford (E) FKH-15	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
16	Ford (E) FKH-16	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
17	Ford (E) FKH-17	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
18	Ford (E) FKH-18	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
19	Ford (E) FKH-19	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
20	Ford (E) FKH-20	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
21	Ford (E) FKH-21	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
22	Ford (E) FKH-22	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
23	Ford (E) FKH-23	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
24	Ford (E) FKH-24	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
25	Ford (E) FKH-25	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
26	Ford (E) FKH-26	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
27	Ford (E) FKH-27	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
28	Ford (E) FKH-28	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
29	Ford (E) FKH-29	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
30	Ford (E) FKH-30	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
31	Ford (E) FKH-31	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
32	Ford (E) FKH-32	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
33	Ford (E) FKH-33	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
34	Ford (E) FKH-34	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
35	Ford (E) FKH-35	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
36	Ford (E) FKH-36	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
37	Ford (E) FKH-37	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
38	Ford (E) FKH-38	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
39	Ford (E) FKH-39	1542	120	120	5' 00"	7.00 20	34x7	Own	6-33 4 1/2	300	9.1	148	70-3000	4	X 3 1/2	WG-T89	Tim 36750	3	Tim 5121H	FE	3	70-4 7 1/2	Owd	Owd	Tim 29500H	L4H	210	306	8	62 1/2	44 1/2	62 1/2
40																																

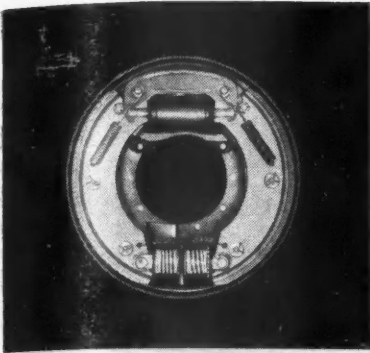
Line Number	MAKE AND MODEL	GENERAL (See Keynote)			TIRE SIZES		ENGINE DETAILS					TRANS-MISSION		REAR AXLE		FRONT AXLE		BRAKES			C-A Dimensions (Std. W. B.)	FRAME									
		Chassis Price	Standard Wheelbase	Max. W. B.	Gross Vehicle Weight	Chassis Wt. (Skipped)	Standard Rear	Maximum Tire Size	Dual rear S-single rear	Make and Model	Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	H.P. at R.P.M.	Main Bearings Number, Diameter, Length	Governor Standard	Make and Model	Make and Model	Clear and Type			Drive & Torque	Gear Ratio	Range in High	Make and Model	Location	Type	Hand Location		
1	Mack (a)	675	120	136	3800	6,000	178	6,500/17	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
2	Mack (b)	1195	133	193	5275	6,500	200	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
3	Mack (c)	1405	133	193	5500	6,500	200	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
4	Mack (d)	2005	146	194	6350	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
5	Mack (e)	2245	146	194	6400	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
6	Mack (f)	2500	146	194	7000	7,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
7	Mack (g)	2500	146	194	7000	7,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
8	Mack (h)	2500	146	194	7000	7,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
9	Mack (i)	2500	146	194	7000	7,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
10	Mack (j)	2995	146	194	7650	8,250	200	9,750/20	Own CU	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
11	Mack (k)	4250	153	225	9550	9,750	220	10,500/20	Own CE	6-4 3 3/4	340 1/2	9.0	160	73-3200	4-3 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
12	Mack (l)	4250	153	225	9550	9,750	220	10,500/20	Own CE	6-4 3 3/4	340 1/2	9.0	160	73-3200	4-3 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
13	Mack (m)	4250	153	225	9550	9,750	220	10,500/20	Own CE	6-4 3 3/4	340 1/2	9.0	160	73-3200	4-3 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
14	Mack (n)	1180	107	162	5125	6,000	208	7,500/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
15	Mack (o)	1690	107	162	5625	6,500	208	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
16	Mack (p)	2220	108	162	6500	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
17	Mack (q)	2470	108	162	6500	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
18	Mack (r)	2720	108	162	7757	8,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
19	Mack (s)	3220	108	162	7757	8,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
20	Mack (t)	3900	108	171	7500	8,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
21	Mack (u)	4250	108	171	8200	8,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
22	Mack (v)	5150	119	189	10500	9,750	220	10,500/20	Own CE	6-4 3 3/4	340 1/2	9.0	160	73-3200	4-3 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
23	Mack (w)	6100	119	189	10500	9,750	220	10,500/20	Own CE	6-4 3 3/4	340 1/2	9.0	160	73-3200	4-3 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
24	Mack (x)	1785	133	193	5350	6,000	208	7,500/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
25	Mack (y)	2445	133	193	6350	6,500	200	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
26	Mack (z)	2720	108	162	6500	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
27	Mack (aa)	3445	146	194	7050	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
28	Mack (ab)	3745	146	194	8000	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
29	Mack (ac)	4745	146	194	8550	8,250	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
30	Mack (ad)	4250	153	225	10000	9,000	200	10,500/20	Own ED	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
31	Mack (ae)	1980	107	162	5575	6,000	208	7,500/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
32	Mack (af)	2440	107	162	6200	6,000	208	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
33	Mack (ag)	2940	107	162	6375	6,500	200	8,250/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
34	Mack (ah)	3370	108	162	7150	7,000	200	9,000/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
35	Mack (ai)	3970	108	162	8225	7,500	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
36	Mack (aj)	4150	108	162	8500	7,500	200	9,750/20	Own BG	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
37	Mack (ak)	5150	119	189	11000	9,000	200	10,500/20	Own ED	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
38	Mack (al)	6100	119	189	11450	9,750	220	11,250/20	Own ED	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
39	Mack (am)	4250	153	225	10000	9,000	200	10,500/20	Own ED	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33	12-6.33	12-6.33	LAH	286	365	a	TX	52	7x3 1/2 x 4
40	Mack (an)	1980	107	162	5575	6,000	208	7,500/20	Own EN11	6-3 8 3/4	310 1/2	8.4	145	67-3000	4-2 1/2	30	WG TR27	Cla RA40	LAIH	SE	H 5.12-6.33	12-6.33									

1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	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MAKE AND MODEL	Tonnage	Chassis Price	Standard Wheelbase	Gross Vehicle Weight with Tires	Chassis Wt.	Front and Rear	Dual rear Saddle rear	Maximum Tire Size	Make and Model	No. of Cylinders, Stroke and Bore	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M.	Main Bearings Number, Diameter and Length	Governor Standard	Make and Model	Forward Spd's	Make and Model	Gear Ratio (Clear and Type)	Drive & Torque	Make and Model	Make Location	Lining Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	Side Rail Dimensions	Type
1 Corbett	F-12 1 1/2-2 1/2	3375	143 180	4460	6.50/20D	8.25/20	Con A6244	6-3 1/4x4 1/2	244	5.4	4170	83-3200	4-2 1/2x10 1/2	WG T9	8 Tim 55211H	SE	H 5 14-6.6	W18 F20B	L41H	452	TX	7 1/2x3 1/2x4 1/2	T					
2	F-14 2 1/2-3 1/2	3200	145 182	.....	5060	7.50/20D	8.25/20	Con M6271	6-3 1/4x4 1/2	271	5.7	191	85-3200	7-2 1/2x10 1/2	CL B116C	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
3	F-16 3 1/2-4 1/2	4300	155 185	.....	5200	8.25/20D	9.00/20	Con M6250	6-3 1/4x4 1/2	361	6.4	252	85-3200	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
4	F-18 4 1/2-5 1/2	4300	155 185	.....	5200	8.25/20D	9.00/20	Con M6250	6-3 1/4x4 1/2	361	6.4	252	85-3200	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
5	F-20 5 1/2-6 1/2	5500	160 190	.....	9000	9.75/20D	9.75/20	Con 20-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
6	F-22 6 1/2-7 1/2	6800	170 210	.....	12500	10.50/20D	10.50/20	Con 21-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
7	F-25 7 1/2-8 1/2	8500	185 210	.....	15000	10.50/20D	11.25/24	Con 22-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
8	F-28 8 1/2-9 1/2	9500	190 215	.....	16000	10.50/20D	11.25/24	Con 23-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
9	F-30 9 1/2-10 1/2	10500	195 220	.....	17000	10.50/20D	11.25/24	Con 24-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
10	F-32 10 1/2-11 1/2	11500	200 225	.....	18000	10.50/20D	11.25/24	Con 25-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
11	F-34 11 1/2-12 1/2	12500	205 230	.....	19000	10.50/20D	11.25/24	Con 26-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
12	F-36 12 1/2-13 1/2	13500	210 235	.....	20000	10.50/20D	11.25/24	Con 27-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
13	F-38 13 1/2-14 1/2	14500	215 240	.....	21000	10.50/20D	11.25/24	Con 28-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
14	F-40 14 1/2-15 1/2	15500	220 245	.....	22000	10.50/20D	11.25/24	Con 29-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
15	F-42 15 1/2-16 1/2	16500	225 250	.....	23000	10.50/20D	11.25/24	Con 30-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
16	F-44 16 1/2-17 1/2	17500	230 255	.....	24000	10.50/20D	11.25/24	Con 31-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
17	F-46 17 1/2-18 1/2	18500	235 260	.....	25000	10.50/20D	11.25/24	Con 32-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
18	F-48 18 1/2-19 1/2	19500	240 265	.....	26000	10.50/20D	11.25/24	Con 33-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
19	F-50 19 1/2-20 1/2	20500	245 270	.....	27000	10.50/20D	11.25/24	Con 34-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
20	F-52 20 1/2-21 1/2	21500	250 275	.....	28000	10.50/20D	11.25/24	Con 35-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
21	F-54 21 1/2-22 1/2	22500	255 280	.....	29000	10.50/20D	11.25/24	Con 36-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
22	F-56 22 1/2-23 1/2	23500	260 285	.....	30000	10.50/20D	11.25/24	Con 37-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
23	F-58 23 1/2-24 1/2	24500	265 290	.....	31000	10.50/20D	11.25/24	Con 38-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
24	F-60 24 1/2-25 1/2	25500	270 295	.....	32000	10.50/20D	11.25/24	Con 39-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
25	F-62 25 1/2-26 1/2	26500	275 300	.....	33000	10.50/20D	11.25/24	Con 40-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
26	F-64 26 1/2-27 1/2	27500	280 305	.....	34000	10.50/20D	11.25/24	Con 41-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
27	F-66 27 1/2-28 1/2	28500	285 310	.....	35000	10.50/20D	11.25/24	Con 42-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
28	F-68 28 1/2-29 1/2	29500	290 315	.....	36000	10.50/20D	11.25/24	Con 43-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
29	F-70 29 1/2-30 1/2	30500	295 320	.....	37000	10.50/20D	11.25/24	Con 44-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
30	F-72 30 1/2-31 1/2	31500	300 325	.....	38000	10.50/20D	11.25/24	Con 45-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
31	F-74 31 1/2-32 1/2	32500	305 330	.....	39000	10.50/20D	11.25/24	Con 46-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
32	F-76 32 1/2-33 1/2	33500	310 335	.....	40000	10.50/20D	11.25/24	Con 47-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
33	F-78 33 1/2-34 1/2	34500	315 340	.....	41000	10.50/20D	11.25/24	Con 48-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
34	F-80 34 1/2-35 1/2	35500	320 345	.....	42000	10.50/20D	11.25/24	Con 49-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
35	F-82 35 1/2-36 1/2	36500	325 350	.....	43000	10.50/20D	11.25/24	Con 50-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
36	F-84 36 1/2-37 1/2	37500	330 355	.....	44000	10.50/20D	11.25/24	Con 51-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
37	F-86 37 1/2-38 1/2	38500	335 360	.....	45000	10.50/20D	11.25/24	Con 52-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
38	F-88 38 1/2-39 1/2	39500	340 365	.....	46000	10.50/20D	11.25/24	Con 53-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
39	F-90 39 1/2-40 1/2	40500	345 370	.....	47000	10.50/20D	11.25/24	Con 54-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
40	F-92 40 1/2-41 1/2	41500	350 375	.....	48000	10.50/20D	11.25/24	Con 55-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
41	F-94 41 1/2-42 1/2	42500	355 380	.....	49000	10.50/20D	11.25/24	Con 56-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
42	F-96 42 1/2-43 1/2	43500	360 385	.....	50000	10.50/20D	11.25/24	Con 57-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
43	F-98 43 1/2-44 1/2	44500	365 390	.....	51000	10.50/20D	11.25/24	Con 58-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W18 F20B	L41H	335	TD	8 1/2x3 1/2x4 1/2	T					
44	F-100 44 1/2-45 1/2	45500	370 395	.....	52000	10.50/20D	11.25/24	Con 59-R	6-4 1/2x4 1/2	428	5.4	252	106-2000	7-2 1/2x10 1/2	Fu 5A30	SE	H 5 8.3-6.8	W1										

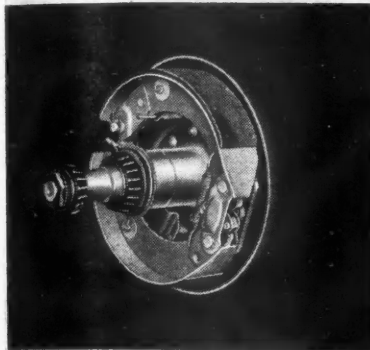
Model	Price	Engine	Transmission	Drive	Weight	Capacity	Speed	Range	Notes
1934 Ford	1200	4-cyl	3-sp	Front	2000	5	40	200	
1934 Chevrolet	1300	4-cyl	3-sp	Front	2100	5	40	200	
1934 Buick	1500	4-cyl	3-sp	Front	2200	5	40	200	
1934 Packard	1800	4-cyl	3-sp	Front	2300	5	40	200	
1934 Chrysler	2000	4-cyl	3-sp	Front	2400	5	40	200	
1934 Oldsmobile	2200	4-cyl	3-sp	Front	2500	5	40	200	
1934 Studebaker	2400	4-cyl	3-sp	Front	2600	5	40	200	
1934 Hudson	2600	4-cyl	3-sp	Front	2700	5	40	200	
1934 Nash	2800	4-cyl	3-sp	Front	2800	5	40	200	
1934 Graham	3000	4-cyl	3-sp	Front	2900	5	40	200	
1934 Buick Wildcat	3200	4-cyl	3-sp	Front	3000	5	40	200	
1934 Chrysler Imperial	3500	4-cyl	3-sp	Front	3100	5	40	200	
1934 Packard Sedan	3800	4-cyl	3-sp	Front	3200	5	40	200	
1934 Studebaker Sedan	4000	4-cyl	3-sp	Front	3300	5	40	200	
1934 Hudson Sedan	4200	4-cyl	3-sp	Front	3400	5	40	200	
1934 Nash Sedan	4400	4-cyl	3-sp	Front	3500	5	40	200	
1934 Graham Sedan	4600	4-cyl	3-sp	Front	3600	5	40	200	
1934 Buick Wildcat Sedan	4800	4-cyl	3-sp	Front	3700	5	40	200	
1934 Chrysler Imperial Sedan	5000	4-cyl	3-sp	Front	3800	5	40	200	
1934 Packard Sedan	5200	4-cyl	3-sp	Front	3900	5	40	200	
1934 Studebaker Sedan	5400	4-cyl	3-sp	Front	4000	5	40	200	
1934 Hudson Sedan	5600	4-cyl	3-sp	Front	4100	5	40	200	
1934 Nash Sedan	5800	4-cyl	3-sp	Front	4200	5	40	200	
1934 Graham Sedan	6000	4-cyl	3-sp	Front	4300	5	40	200	
1934 Buick Wildcat Sedan	6200	4-cyl	3-sp	Front	4400	5	40	200	
1934 Chrysler Imperial Sedan	6400	4-cyl	3-sp	Front	4500	5	40	200	
1934 Packard Sedan	6600	4-cyl	3-sp	Front	4600	5	40	200	
1934 Studebaker Sedan	6800	4-cyl	3-sp	Front	4700	5	40	200	
1934 Hudson Sedan	7000	4-cyl	3-sp	Front	4800	5	40	200	
1934 Nash Sedan	7200	4-cyl	3-sp	Front	4900	5	40	200	
1934 Graham Sedan	7400	4-cyl	3-sp	Front	5000	5	40	200	
1934 Buick Wildcat Sedan	7600	4-cyl	3-sp	Front	5100	5	40	200	
1934 Chrysler Imperial Sedan	7800	4-cyl	3-sp	Front	5200	5	40	200	
1934 Packard Sedan	8000	4-cyl	3-sp	Front	5300	5	40	200	
1934 Studebaker Sedan	8200	4-cyl	3-sp	Front	5400	5	40	200	
1934 Hudson Sedan	8400	4-cyl	3-sp	Front	5500	5	40	200	
1934 Nash Sedan	8600	4-cyl	3-sp	Front	5600	5	40	200	
1934 Graham Sedan	8800	4-cyl	3-sp	Front	5700	5	40	200	
1934 Buick Wildcat Sedan	9000	4-cyl	3-sp	Front	5800	5	40	200	
1934 Chrysler Imperial Sedan	9200	4-cyl	3-sp	Front	5900	5	40	200	
1934 Packard Sedan	9400	4-cyl	3-sp	Front	6000	5	40	200	
1934 Studebaker Sedan	9600	4-cyl	3-sp	Front	6100	5	40	200	
1934 Hudson Sedan	9800	4-cyl	3-sp	Front	6200	5	40	200	
1934 Nash Sedan	10000	4-cyl	3-sp	Front	6300	5	40	200	
1934 Graham Sedan	10200	4-cyl	3-sp	Front	6400	5	40	200	
1934 Buick Wildcat Sedan	10400	4-cyl	3-sp	Front	6500	5	40	200	
1934 Chrysler Imperial Sedan	10600	4-cyl	3-sp	Front	6600	5	40	200	
1934 Packard Sedan	10800	4-cyl	3-sp	Front	6700	5	40	200	
1934 Studebaker Sedan	11000	4-cyl	3-sp	Front	6800	5	40	200	
1934 Hudson Sedan	11200	4-cyl	3-sp	Front	6900	5	40	200	
1934 Nash Sedan	11400	4-cyl	3-sp	Front	7000	5	40	200	
1934 Graham Sedan	11600	4-cyl	3-sp	Front	7100	5	40	200	
1934 Buick Wildcat Sedan	11800	4-cyl	3-sp	Front	7200	5	40	200	
1934 Chrysler Imperial Sedan	12000	4-cyl	3-sp	Front	7300	5	40	200	
1934 Packard Sedan	12200	4-cyl	3-sp	Front	7400	5	40	200	
1934 Studebaker Sedan	12400	4-cyl	3-sp	Front	7500	5	40	200	
1934 Hudson Sedan	12600	4-cyl	3-sp	Front	7600	5	40	200	
1934 Nash Sedan	12800	4-cyl	3-sp	Front	7700	5	40	200	
1934 Graham Sedan	13000	4-cyl	3-sp	Front	7800	5	40	200	
1934 Buick Wildcat Sedan	13200	4-cyl	3-sp	Front	7900	5	40	200	
1934 Chrysler Imperial Sedan	13400	4-cyl	3-sp	Front	8000	5	40	200	
1934 Packard Sedan	13600	4-cyl	3-sp	Front	8100	5	40	200	
1934 Studebaker Sedan	13800	4-cyl	3-sp	Front	8200	5	40	200	
1934 Hudson Sedan	14000	4-cyl	3-sp	Front	8300	5	40	200	
1934 Nash Sedan	14200	4-cyl	3-sp	Front	8400	5	40	200	
1934 Graham Sedan	14400	4-cyl	3-sp	Front	8500	5	40	200	
1934 Buick Wildcat Sedan	14600	4-cyl	3-sp	Front	8600	5	40	200	
1934 Chrysler Imperial Sedan	14800	4-cyl	3-sp	Front	8700	5	40	200	
1934 Packard Sedan	15000	4-cyl	3-sp	Front	8800	5	40	200	
1934 Studebaker Sedan	15200	4-cyl	3-sp	Front	8900	5	40	200	
1934 Hudson Sedan	15400	4-cyl	3-sp	Front	9000	5	40	200	
1934 Nash Sedan	15600	4-cyl	3-sp	Front	9100	5	40	200	
1934 Graham Sedan	15800	4-cyl	3-sp	Front	9200	5	40	200	
1934 Buick Wildcat Sedan	16000	4-cyl	3-sp	Front	9300	5	40	200	
1934 Chrysler Imperial Sedan	16200	4-cyl	3-sp	Front	9400	5	40	200	
1934 Packard Sedan	16400	4-cyl	3-sp	Front	9500	5	40	200	
1934 Studebaker Sedan	16600	4-cyl	3-sp	Front	9600	5	40	200	
1934 Hudson Sedan	16800	4-cyl	3-sp	Front	9700	5	40	200	
1934 Nash Sedan	17000	4-cyl	3-sp	Front	9800	5	40	200	
1934 Graham Sedan	17200	4-cyl	3-sp	Front	9900	5	40	200	
1934 Buick Wildcat Sedan	17400	4-cyl	3-sp	Front	10000	5	40	200	
1934 Chrysler Imperial Sedan	17600	4-cyl	3-sp	Front	10100	5	40	200	
1934 Packard Sedan	17800	4-cyl	3-sp	Front	10200	5	40	200	
1934 Studebaker Sedan	18000	4-cyl	3-sp	Front	10300	5	40	200	
1934 Hudson Sedan	18200	4-cyl	3-sp	Front	10400	5	40	200	
1934 Nash Sedan	18400	4-cyl	3-sp	Front	10500	5	40	200	
1934 Graham Sedan	18600	4-cyl	3-sp	Front	10600	5	40	200	
1934 Buick Wildcat Sedan	18800	4-cyl	3-sp	Front	10700	5	40	200	
1934 Chrysler Imperial Sedan	19000	4-cyl	3-sp	Front	10800	5	40	200	
1934 Packard Sedan	19200	4-cyl	3-sp	Front	10900	5	40	200	
1934 Studebaker Sedan	19400	4-cyl	3-sp	Front	11000	5	40	200	
1934 Hudson Sedan	19600	4-cyl	3-sp	Front	11100	5	40	200	
1934 Nash Sedan	19800	4-cyl	3-sp	Front	11200	5	40	200	
1934 Graham Sedan	20000	4-cyl	3-sp	Front	11300	5	40	200	
1934 Buick Wildcat Sedan	20200	4-cyl	3-sp	Front	11400	5	40	200	
1934 Chrysler Imperial Sedan	20400	4-cyl	3-sp	Front	11500	5	40	200	
1934 Packard Sedan	20600	4-cyl	3-sp	Front	11600	5	40	200	
1934 Studebaker Sedan	20800	4-cyl	3-sp	Front	11700	5	40	200	
1934 Hudson Sedan	21000	4-cyl	3-sp	Front	11800	5	40	200	
1934 Nash Sedan	21200	4-cyl	3-sp	Front	11900	5	40	200	
1934 Graham Sedan	21400	4-cyl	3-sp	Front	12000	5	40	200	
1934 Buick Wildcat Sedan	21600	4-cyl	3-sp	Front	12100	5	40	200	
1934 Chrysler Imperial Sedan	21800	4-cyl	3-sp	Front	12200	5	40	200	
1934 Packard Sedan	22000	4-cyl	3-sp	Front	12300	5	40	200	
1934 Studebaker Sedan	22200	4-cyl	3-sp	Front	12400	5	40	200	
1934 Hudson Sedan	22400	4-cyl	3-sp	Front	12500	5	40	200	
1934 Nash Sedan	22600	4-cyl	3-sp	Front	12600	5	40	200	
1934 Graham Sedan	22800	4-cyl	3-sp	Front	12700	5	40	200	
1934 Buick Wildcat Sedan	23000	4-cyl	3-sp	Front	12800	5	40	200	
1934 Chrysler Imperial Sedan	23200	4-cyl	3-sp	Front	12900	5	40	200	
1934 Packard Sedan	23400	4-cyl	3-sp	Front	13000	5	40	200	
1934 Studebaker Sedan	23600	4-cyl	3-sp	Front	13100	5	40	200	
1934 Hudson Sedan	23800	4-cyl	3-sp	Front	13200	5	40	200	
1934 Nash Sedan	24000	4-cyl	3-sp	Front	13300	5	40	200	
1934 Graham Sedan	24200	4-cyl	3-sp	Front	13400	5	40	200	
1934 Buick Wildcat Sedan	24400	4-cyl	3-sp	Front	13500	5	40	200	
1934 Chrysler Imperial Sedan	24600	4-cyl	3-sp	Front	13600	5	40	200	
1934 Packard Sedan	24800	4-cyl	3-sp	Front	13700	5	40	200	
1934 Studebaker Sedan	25000	4-cyl	3-sp	Front	13800	5	40	200	
1934 Hudson Sedan	25200	4-cyl	3-sp	Front	13900	5	40	200	
1934 Nash Sedan	25400	4-cyl	3-sp	Front	14000	5	40	200	
1934 Graham Sedan	25600	4-cyl	3-sp	Front	14100	5	40	200	
1934 Buick Wildcat Sedan	25800	4-cyl	3-sp	Front	14200	5	40	200	
1934 Chrysler Imperial Sedan	26000	4-cyl	3-sp	Front	14300	5	40	200	
1934 Packard Sedan	26200	4-cyl	3-sp	Front	14400	5	40	200	
1934 Studebaker Sedan	26400	4-cyl	3-sp	Front	14500	5	40	200	
1934 Hudson Sedan	26600	4-cyl	3-sp	Front	14600	5	40	200	
1934 Nash Sedan	26800	4-cyl	3-sp	Front	14700	5	40	200	
1934 Graham Sedan	27000	4-cyl	3-sp	Front	14800	5	40	200	
1934 Buick Wildcat Sedan	27200	4-cyl	3-sp	Front	14900	5	40	200	
1934 Chrysler Imperial Sedan	27400	4-cyl	3-sp	Front	15000	5	40	200	
1934 Packard Sedan	27600	4-cyl	3-sp	Front	15100	5	40	200	
1934 Studebaker Sedan	27800	4-cyl	3-sp	Front	15200	5	40	200	
1934 Hudson Sedan	28000	4-cyl	3-sp	Front	15300	5	40	200	
1934 Nash Sedan	28200	4-cyl	3-sp	Front	15400	5	40	200	
1934 Graham Sedan	28400	4-cyl	3-sp	Front	15500	5	40	200	
1934 Buick Wildcat Sedan	28600	4-cyl	3-sp	Front	15600	5	40	200	
1934 Chrysler Imperial Sedan	28800	4-cyl	3-sp	Front	15700	5	40	200	
1934 Packard Sedan	29000	4-cyl	3-sp	Front	15800	5	40	200	
1934 Studebaker Sedan	29200	4-cyl	3-sp	Front	15900	5	40	200	
1934 Hudson Sedan	29400	4-cyl	3-sp	Front	16000	5	40	200	
1934 Nash Sedan	29600	4-cyl	3-sp	Front	16100	5	40	200	
1934 Graham Sedan	29800	4-cyl	3-sp	Front	16200	5	40	200	
1934 Buick Wildcat Sedan	30000	4-cyl	3-sp	Front	16300	5	40	200	
1934 Chrysler Imperial Sedan	30200	4-cyl	3-sp	Front	16400	5	40	200	
1934 Packard Sedan	30400	4-cyl	3-sp	Front	16500	5	40	200	
1934 Studebaker Sedan	30600	4-cyl	3-sp	Front	16600	5	40	200	
1934 Hudson Sedan	30800	4-cyl	3-sp	Front	16700	5	40	200	
1934 Nash Sedan	31000	4-cyl	3-sp	Front	16800	5	40	200	
1934 Graham Sedan	31200	4-cyl	3-sp	Front	16900	5	40	200	
1934 Buick Wildcat Sedan	31400	4-cyl	3-sp	Front	17000	5	40	200	

Line Number	MAKE AND MODEL	GENERAL (See Keynote)				TIRE SIZES		ENGINE DETAILS				TRANS-MISSION		REAR AXLE		FRONT AXLE	BRAKES				Side Rail Dimensions	Type							
		Tonnage Rating	Chassis Price	Standard Wheelbase	Gross Vehicle Weight with Max. W.B.	Chassis Wt. (Stripped)	Dual rear S-single rear	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M.	Number, Diameter, and Length	Governor Standard	Make and Model	Gear and Type	Drive & Torque	Range in High	Make and Model	Location	Operat'n	Lining Area	Drum Area	Drum Material	Hand Location	C-A Dimension (Std. W.B.)	Frame	
1	(D) 512 4R	.....	8334	205	285	38000	13500	9.00/20D	6-4 1/2 x 6	672	17	500	150-1800	7-4 1/2 x 16 1/2	Y B L 7341	4 Tim SW252	W F	R 20-9.25	Tim 36000	W841A	800	1194	a	800	1194	a	TD 120	7-1/2 x 3 1/2	C
2	(D) 520 2F	.....	7886	214	289	40300	12200	9.00/20D	6-4 1/2 x 6	672	17	500	150-1800	7-4 1/2 x 16 1/2	Y B L 7341	4 Tim 75738	2F	H 6.85-9.41	Tim 36000	W841A	782	1158	a	782	1158	a	TD 127	7-1/2 x 3 1/2	C
3	(D) 522 2F	.....	8061	214	289	40600	12150	9.00/20D	6-4 1/2 x 6	672	17	500	150-1800	7-4 1/2 x 16 1/2	Y B L 7341	4 Tim 76738	2F	H 6.02-9.2	Tim 36000	W841A	800	1194	a	800	1194	a	TD 127	7-1/2 x 3 1/2	C
4	(D) 523 4R	.....	8149	214	289	40600	13700	9.00/20D	6-4 1/2 x 6	672	17	500	150-1800	7-4 1/2 x 16 1/2	Y B L 7341	4 Tim SW352	W F	R 5.40-10.2	Tim 36000	W841A	800	1194	a	800	1194	a	TD 127	7-1/2 x 3 1/2	C
5	(D) 524 4R	.....	8342	214	289	40600	11000	9.00/20D	6-4 1/2 x 6	672	17	500	150-1800	7-4 1/2 x 16 1/2	Y B L 7341	4 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	800	1194	a	800	1194	a	TD 127	7-1/2 x 3 1/2	C
6	(D) 525 4R	.....	7280	211	226	30000	12400	9.75/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 5.40-10.2	Tim 35100	W841A	800	1194	a	800	1194	a	TD 127	7-1/2 x 3 1/2	C
7	(D) 526 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
8	(D) 527 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
9	(D) 528 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
10	(D) 529 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
11	(D) 530 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
12	(D) 531 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
13	(D) 532 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
14	(D) 533 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
15	(D) 534 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
16	(D) 535 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
17	(D) 536 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
18	(D) 537 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
19	(D) 538 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
20	(D) 539 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
21	(D) 540 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
22	(D) 541 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
23	(D) 542 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
24	(D) 543 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
25	(D) 544 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
26	(D) 545 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
27	(D) 546 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
28	(D) 547 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
29	(D) 548 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
30	(D) 549 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
31	(D) 550 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
32	(D) 551 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
33	(D) 552 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
34	(D) 553 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
35	(D) 554 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
36	(D) 555 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
37	(D) 556 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
38	(D) 557 4R	.....	7429	204	234	30000	10760	9.00/20D	6-4 1/2 x 6	625	5	383	108-2400	7-3 1/2 x 11 1/2	Y F U 6A-620	5 Tim SW-252	W F	R 6.20-9.25	Tim 35100	W841A	668	1192	a	668	1192	a	TD 127	7-1/2 x 3 1/2	C
39	(D) 558 4R	.....	7429	204	234	30000																							



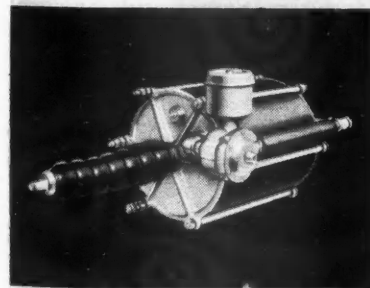
BENDIX *Hydraulic* **BRAKES**

Bendix Hydraulic actuation produces constantly equalized pressure at all four wheels. Adjustment of all Bendix Brakes is very simple, maintaining concentricity and permitting compensation for uneven lining wear.



BENDIX *Mechanical* **BRAKES**

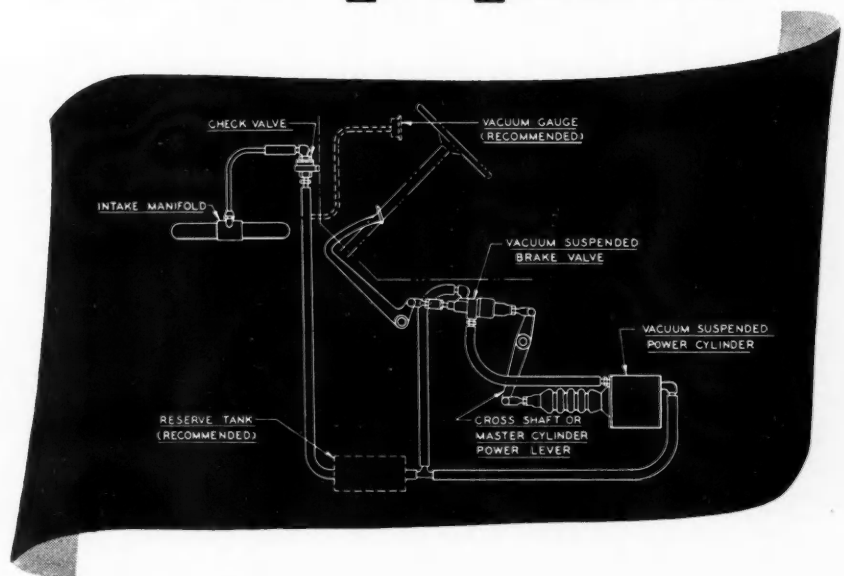
The Bendix Equal-Action Mechanical Brake insures thorough distribution of pressure over the full brake lining area of both shoes. Result: Equal efficiency forward and rearward; less effort needed, better heat dissipation, longer lining and drum life. In use by many leading truck and trailer manufacturers.



BENDIX B-K *Controlled Vacuum* **POWER BRAKING**

Bendix B-K Controlled Vacuum Power Braking, pioneer in its field, is backed by fifteen years of world-wide experience. As a result, Bendix B-K units are far in advance in engineering principles, providing finest graduation of brake control and perfect balanced brake action. The Reactionary feature of the Bendix B-K system is unique in that it constantly maintains desirable "pedal-feel," and avoids sudden, lock-wheel stops. Bendix design protects against external injury to mechanism through mud, water and road impacts.

Why the **BENDIX** Braking System is so popular



First of all — the Bendix Braking System, throughout its engineering development, has had *all* important braking principles and applications at its disposal. There has never been any cause for adopting possible "second-choice" methods.

Second — the Bendix Braking System, with Power Braking supplementing the primary brakes, puts power *ON* the brakes instead of *IN* them. The original, primary layout remains intact, undisturbed.

Third — the entire Bendix Braking System, consisting of Bendix Hydraulic or Mechanical Brakes, with Bendix Controlled Vacuum Power applications, is designed and built in its entirety by one company. It is thoroughly co-ordinated — built to function properly as a unified system. Constantly refined and improved.

Fourth — the Bendix Braking System more than meets the requirements of *all* state laws, for single vehicle or trailer operation.

BENDIX PRODUCTS DIVISION

OF BENDIX AVIATION CORPORATION

401 Bendix Drive, South Bend, Indiana

LUBRICANT AND COOLING SYSTEM

CAPACITIES of Motor Trucks

a—2-speed rear, 8 qt.
b—Double reduction rear, 6½ qt.
c—Double reduction rear, 9 qt.
d—Front axles have same capacity as rear

e—10L summer, 14L winter
f—2-speed rear, 15L
g—2-speed rear, 18L
h—Auxiliary transmission and power divider require 8½ qt. additional

i—Each axle
j—10L summer, 15L winter
k—9 qt. summer, 12 qt. winter
m—4 qt. summer, 6 qt. winter
n—Capacity of jackshaft unit

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L, Meaning Pounds			
	Engine	Trans-mission	Rear Axle	Cooling System Capacity (Qt.)
AUTOCAR				
A, UA	6	4	4	22
B, UB	6	6	7	22
RL, RLD, RM, RMT, ITR, 6X2RL, RLS, URLS	10	7	6	23
D, DP	10	7	6	39
UD, 1UTR	10	7	6	37
UDP, 6X2UD	10	7	9	37
S	12	15	9	39
N, DH, 3TR	12	7	9	39
6X2NF	12	9	9	39
DF, 2TR, 6X2DF	12	7	6	39
T, NF, 5TR, 6X2T, UNF, UT, 4UTR, 5UTR, 6X2UNF, 6X2UT	12	9	9	41
UN, 2UTR, 3UTR, 6X2UN, US	12	7	6	41
UDF	12	15	9	41
C	12	9½	39	
4X4DF, 4X4N	12	11½	39	
4X4NF	12	11½	41	
4X4S	12	7	39	
6X4DF	12	9	41	
6X4TO, 6X4UTO, 6X4UTD	12	15	41	
6X4TD	12	15	28	41
6X4TC	12	15	28	41
RB, URB	10	6 Q	6 Q	23
BANTAM				
60	3	1¼ L	1¼ L	4
BROCKWAY				
78 (1936-39)	5	3	3½	16
83 (1936-39)	5	3 Q	3½ Q	15
88, 92 (1936-39)	5	3	5	15
94 (1936-39)	5	3	6½	15
96, 110, 125X (1936-39)	8	3	5	23
130, 145 (1936-39)	8	3	6½	23
150X4 (1936-39)	8	4½	6½	23
150X5 (1936-39)	8	6	6½	23
160X, 160XSBT (1936-39)	8	8	6½	30
165X (1936-39)	8	8	8	30
170X (1936-39)	10	12	5½	30
180X SBT Spec. (1936)	10	12	6½	30
175X, 195X (1936-39)	10	12	8	30
220X (1936-39)	10	12	9	30
240X (1936-39)	10	12	8	32
250X (1936-39)	10	11	9	32
112 (1936-39)	7	3 Q	5 Q	23
128 (1936-39)	7	3 Q	6½ Q	23
CHEVROLET				
½ Ton (1934-35)	5	1¼	2¼	10½
1½ Ton (1934-35)	5	3¼	3¼	10½
½ Ton (1936)	5	1¼	2¼	15
1½ Ton (1936)	5	3¼	3¼	15
¾, 1 Ton (1937-38)	5	3½	2¼	14
1½ Ton (1937-38)	5	3½	4½	14
1½ Ton C.O.E. (1939)	5	3¼ Q	4½ Q	16½
CORBITT				
12B (1937)	6	4	6	26
22B (1937)	8	12	7	30
14BT (1937)	8	4	4	26
18BT (1937)	8	12	7	30
22BT (1937)	10	15	7½	38
27DT (1937)	10	15	8	38
12B (1938-39)	5	4	6	26
13B (1938-39)	5	4	4	27
17B (1938-39)	7	6	7	28
21B (1938-39)	8	8	7½	30
26D (1938-39)	8	8	8	30
14BT (1938-39)	7	6	4	29
18BT (1938-39)	8	8	7	31
22BT (1938-39)	10	12	7½	38
27DT, F27 (1938), 27BT (39)	10	12	8	38
F12 (1938-39)	5	4	6	27
F14 (1938-39)	7	4	4	28
F18 (1938-39)	8	4	4½	30
F19 (1938-39)	7	6	4½	28
F23 (1938-39)	10	8	5½	38
F35	10	12	8½	38

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L, Meaning Pounds			
	Engine	Trans-mission	Rear Axle	Cooling System Capacity (Qt.)
DIAMOND T				
412DR (1935-37)	8	5	6	24½
512B (1935-37)	8	5	4	24½
512DR (1935-37)	8	5	7½	24½
212A, 212B (1936-37)	6	2¼	3	23½
221 (1936-37)	6	2¼	3	24
228 (1936-37)	6	2¼	4	23½
244, 313 (1936-37)	6	2¼	4	24
320 (1936-37)	6	3	4	26½
353, 360 (1936-37)	6	5	4	26½
80 (1936-37)	6	1	2½	18
80, 301, 304 (1938)	6	2	2	21
401COE (1938)	6	2	3	23½
402COE (1938)	6	2	4	23½
404, 405 (1938)	6	2	3	22½
406 (1938)	6	2	3	23
507COE	6	3	4	23½
509	6	3	3	23
607COE	6	3	4	26
609COE	6	5	4	28
611	6	3½	4	25
612	6	5	4	25
613, 614	8	5	4	24
412DR, 512DR	8	9	6	26
512B	8	9	5	26
201, 305, 306	8	2	2	16
201C, 305C	6	2	2½	18
306C	6	2	3	18
404, 406	6	2¼	3	23
404C, 509	6	2¼	3	23
509C, 612C	6	2¼	4	23
614	6	6	4	22
614C	6	6	4	24
803C	8	10	5	28
804C	8	10	6	28
DODGE				
KC, KCL, KH Series, LC	5	1¼	1¾	15
K32, K33, K34	5	3	2½	12
K35, K36, K37, K38, K45, K46, K47, K48	6	2½	4	14
K50, K51, K52, K70, K71, K72	8	5	4	23½
LE Series	5	3	2¼	16½
LF Series	5	3	4	16
LG, LH Series	6	5½	7	18
K50V, K51V, K52V, K60V, K61V, K62V	8	5½	7	20¾
MC, RC Series (1937-38)	5	1¼	1¾	15
MD, RD Series (1937-38)	5	1¼	2	16
ME, RE Series (1937-38)	5	3	3¼	18
MF, RF Series (1937-38)	5	3	4	18
MG, MH, RG, RH Series (1937-38)	5	5½	4	19
ML, MK, RL, RK, RU Series (1937-38)	8	5½	7	20¾
TC (3-Speed Trans.)	5	1¼	1¾	15½
TC (4-Speed Trans.)	5	3	1¾	15½
TD-15 (3-Speed Trans.)	5	1¼	1¾	17
TD-15 (4-Speed Trans.)	5	3	1¾	17
TD-20, TD-21 (3-Speed Trans.)	5	1¼	2	17
TD-20, TD-21 (4-Speed Trans.)	5	3	2	17
TE (4-Speed Trans.)	5	3	3¼	19½
TF (4-Speed Trans.)	5	3	5½	19½
TF (5-Speed Trans.)	5	5½	5½	20½
TG, TH	5	5½	5ab	20½
TL, TK, RO, RP	8	5½	7ac	28
TLD, TKD	14	5½	7ac	
FEDERAL				
9 (1937-38)	5	2	2	18
10 (1937-38)	4	2	2	18
11, 11K, 12K, 14K (1937-39)	4½	2	2	15
11H (1937-38)	4½	2	4	15
15, 15H, 15K, 18, 18H, 19K, 20, 20H, 20K (1937-39)	4	2	4	25
75, 75H, 75K, 80, 80H, 80K (1937-39)	4	2	4	25
25, 85 (1937-38)	4	4	4	25
29, 29K, 89, 89K (1937-39)	4	6½	6	25

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L, Meaning Pounds				Cooling System Capacity (Qt.)
	Engine	Trans- mission	Rear Axle		
FEDERAL —Continued					
29H, 89H (1937-39)	4	6½	7½		25
25H, 25K, 85, 85H, 85K (1937-39)	4	4	6		25
40, 50 (1937-39)	8	3	7½		30
C7, C8 (1937-39)	10	12	11		30
40F, 50F (1939)	8	4½	7½		30
62 (1939)	12½	11	16		34
63 (1939)	10	11	16		34
FORD					
AA, BB, 4 Cyl. (1929-34)	5	2½ L	9 L		13½
BBV8 (1932-34)	5	2½ L	9 L		22
51V8 (1935-36)	5	2½ L	9 L		22
75V8 (1937)	4	5 L	9 L		25
79V8 (1937)	5	5 L	9 L		25
81T, 81TT (1938)	5	5 L	9 L		25
81Y (1938)	5	2½ L	5 L		22
82Y (1938)	4	2½ L	5 L		22
81C (1938)	5	2½ L	2½ L		22
82C (1938)	4	2½ L	2½ L		16
91T, 91TT, 911W, 91W, 91TW, 99T, 99TT, 991W, 99W, 99TW (1939)	5	5 L	7 L		24
91Y, 91C (1939)	5	3 L	3 L		22
92Y, 922C (1939)	4	3 L	3 L		18
FWD					
HS (1938-39)	10	6	6d		11
HG (1938-39)	12	8	6d		24
HM (1938-39)	12	8	4d		28
HH6 (1938-39)	12	8	4d		28
CU (1939)	12	16	6d		26
CUA (1939)	12	8	6d		26
SUA (1938-39)	12	12	4d		38
SU, YU (1938-39)	12	16	4d		38
MJ5 (1938-39)	12	12	8d		40
MJ6 (1938-39)	12	11	8d		40
M7 (1938-39)	20	11	8d		82
M10 (1938-39)	20	11	8d		60
MJ6X6 (1938-39)	12	11	10d		40
M6X6 (1938-39)	20	11	13d		40
T26 (1939)	10	6	6d		24
T32 (1939)	12	8	6d		28
T40 (1939)	12	12	4d		38
T60 (1939)	20	13	4d		38
T65 (1939)	20	13	8d		40
T72 (1939)	20	11	8d		52
GENERAL MOTORS					
T14 (1937)	6	1½ L	5 L		15½
T16 (1937)	6	7 L	7½ L		15½
F16 (1937)	6	7 L	6½ L		15½
T16H, F16H (1937)	6	7 L	6½ L		15½
T18, T18H (1937)	7	4 L	6½ L		16
F18, F18H (1937)	6	4 L	6½ L		16
T23, F23 (1937)	8	7 L	10 L		22
T23H, F23H (1937)	8	7 L	13 L		20
T33 (1937)	7	7 L	13 L		20
F33 (1937)	6	7 L	13 L		20
T33H (1937)	7	7 L	9 L		20
F33H (1937)	6	7 L	9 L		20
T46 (1937)	12	10	28		28
F46 (1937)	10	10	28		28
T46, 400 (1937)	10	10	34		34
F46, 400 (1937)	10	10	34		34
T61 (1937)	12	12	34		34
T61 (1937)	10	10	34		34
F61 (1937)	10	10	34		34
T61H (1937)	12	12	34		34
T61H (1937)	10	10	34		34
F61H (1937)	10	10	34		34
T14, T14S, T15 (1938)	6	1½ L	5 L		15½
T15S (1938)	6	1½ L	7½ L		16
T16, F16 (1938)	6	6½ L	7½ L		17
T16H, F16H (1938)	6	6½ L	7½ L		17
T18, T18H (1938)	7	4 L	10 L		16
F18, F18H (1938)	6	4 L	10 L		17
T23 (1938)	7	7 L	10 L		17
T23H (1938)	7	7 L	13 L		17
F23 (1938)	6	7 L	10 L		17
F23H (1938)	6	7 L	13 L		17
T33 (1938)	7	13 L	13 L		17
T33H (1938)	7	13 L	9 L		17
F33 (1938)	6	13 L	13 L		17
F33H (1938)	6	13 L	9 L		17
T46 (1938)	12	13 L	9 L		28
F46 (1938)	10	13 L	9 L		28
T61, T61H, F61, F61H (1938)	10	(e)	16 L		34
AC-100 (1939)	8	1½ L	5 L		15½
AC-150 (1939)	8	1½ L	5 L		16
AC-250 (1939)	8	1½ L	5½ L		16
AC-300, AF-300 (1939)	8	6½ L	6 L		17
AC-350, AF-350 (1939)	8	6½ L	7 L		17
AC-400 (1939)	9	4 L	7 L		17
AF-400 (1939)	9	7 L	7 L		18
AC-450, AF-450 (1939)	9	7 L	8½ L		19
AC-500, AF-500 (1939)	9	13 L	8½ L		19
AC-550, AC-600, AF-550, AF-600 (1939)	9	13 L	16 L		18
AC-650, AF-650 (1939)	9	13 L	20 L		18
AC-700, AF-700 (1939)	10½	11½ L	20 L		22
AC-800, AF-800 (1939)	10½	9	20 L		22
AC-850, AF-850 (1939)	10½	9	12 L		22

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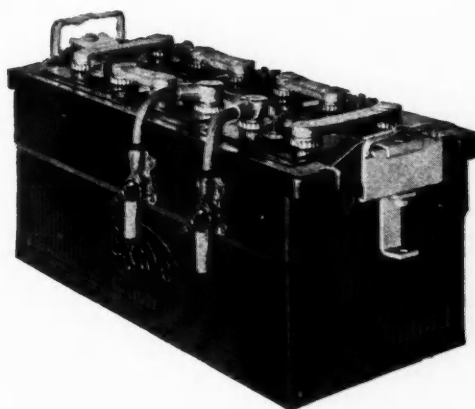
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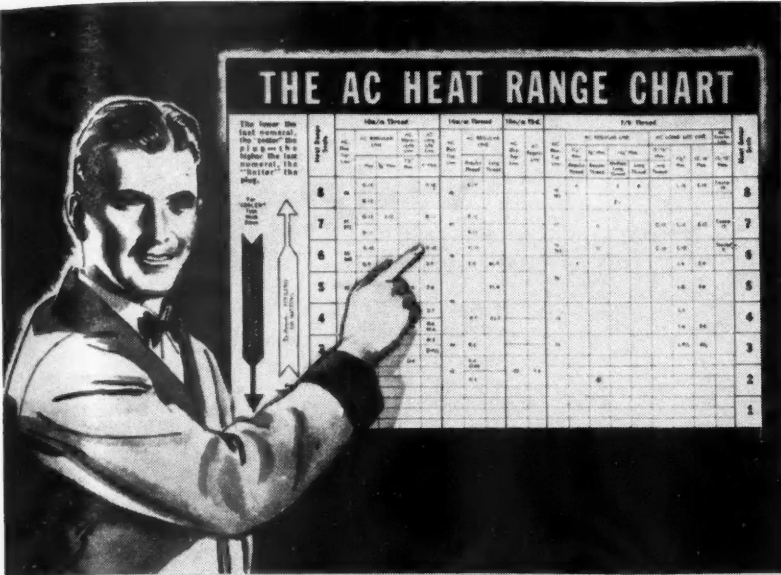
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LUBRICANT AND COOLING SYSTEM CAPACITIES—Continued from page 68

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L, Meaning Pounds			Cooling System Capacity (Qt.)
	Engine	Trans- mission	Rear Axle	
GRAMM				
15 (1937-39)	6	3	3	18
25, 30 (1937-39)	6	3	3	19
40 (1937-39)	6	3	4½	19
45, 50 (1937-39)	6	3	4	19
55 (1937-39)	6	4	4	20
70 (1937-39)	6	3	7	20
75 (1937-39)	6	3	7	22
85 (1937-39)	6	3	8	22
DJX40 (1937-39)	6	3	4½	23
DJX70 (1937-39)	6	3	7	23
DJX75 (1937-39)	6	3	7	25
DJX85 (1937-39)	6	3	8	25
DJX55 (1937-39)	6	4	4	23
HUG				
42 (1936-39)	10	16 L	9 L	28
43 (1936-39)	10	24 L	11 L	28
D42 (1936-39)	10	24 L	9 L	31
D43 (1936-39)	10	15 L	11 L	31
D43L (1936-39)	14	15 L	12 L	38
70K (1936-39)	10	16 L	12 L	28
87Q, D87Q (1936-39)	10	24 L	16 L	28
99, 99S, D99, D99S (1936-39)	14	24 L	52 L	38½
INTERNATIONAL				
C1, C15, C30, CS30, C30S	6½	2½	4¾	15
A1, A2, B2, M2, M3, C10, C20, CS20	4	2½	4¾	17
B3	7	2½	4¾	20
C5	4	1½	2	14
C35, C35B, CS35, CS35B, C35T, CS35T, B4, C40, C50, C40T, C40F	7	4½	7½	20
A4, A5, A6, C50, C50T	10	5½	6	28½
C55, C55F, C55T, C60, C60T	9	5½	6	29½
A7, A7F	20	24	12	42
A8	20	24	12	42
D2, D15	6	1½	2	15½
D5	4	1½	2	14½
D30, D303, D186T	6	2½	3½	18
DS30, DS30B, DS186T	6	2½	8½	18
D35, D216T	6½	2½	5	18½
D35B	6½	7	5	18½
D35S	6½	2½	8½	18½
D40	6½	7	5	21½
D50, D246T	8½	9	8	24½
D60, DR60	8½	9½	8	28
DR70, DR346T	8½	9½	8	31
D300	6	2½	3½	19½
DS300	6	2½	8½	19½
D246F	8½	7h	7½	24½
D346F	8½	9½h	6i	31
D426F	8½	12h	8i	31
AR626F	22	12h	6i	
LA FRANCE REPUBLIC				
C3	8	3	4	22
D4	8	3½	4	22
E4	8	4	5½	22
F4, H6	8	8	6	32
K1	10	6	8	36
M4	10	6	13	36
EH5B, EH5D	8	6	5½	40
EH6B, EH6D	9	6	6	40
FH5B, FH5D	8	8	6	40
HH7	8	8	6	
KH2	10	12	6	
MH5	10	12	8	
MACK				
BG-EC	10	11	6	27
EE, EF	7	3	4	28
EM-S.R.	10	11	6	27
EQ-D.R.	10	11	6½	27
EH	10	6	7	27
BF-S.R., EB-S.R.	10	11	7	31
BF-D.R., EB-D.R.	10	11	8	31
AB Chain	10	4	6	39
AB-D.R.	10	4	6	39
BM	16	10½	8	42
CH	16	8	8	44
BX Chain	16	10½	6	45
BX2WD, BX-D.R.	16	10½	8	45
CJ2WD, CJ	16	8	8	46
BQ2WD, BQ	16	14	7	52
AK4	8	14	7	71
AK6	8	14	7	90
AC4	8	24		71
BX-4W.D.	16	10½	14	45
CJ-4W.D.	16	8	14	46
BQ-4W.D.	16	14	14	52
EG	7	6	6	28
ED	6	2	4	16
MARMON-HERRINGTON				
A10-4, A20-4	6	4	8	22
A30-4, A40-4, A50-4	7	12	9	28
TH300-4, TH310-4	10	13	16	36
TH310A-4, TH310A-6	10	13	18	40
TH315-4, TH315-6	20	16	18	50
TH320-4, TH320-6	20	8	24	50
B10-4, C10-4, B20-4, C20-4, C20-6, B30-4, C30-4, C30-6	7	4	8	20

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L. Meaning Pounds			Cooling System Capacity (Qt.)
	Engine	Trans- mission	Rear Axle	
MARMON-HERIN'ON—Cont.				
B40-4, B40-6, C40-4, C40-6, B50-4	10	12	9	36
B60-4, C35-4, C55, DR4, C60-4, C60-6	12	12	12	36
B70-4, B70-6, C70-4	12	12	12	40
B80-4, B80-6, C80-4, C80-6	12	12	18	40
TH415-4, TH415-6, TH515-4, TH515-6, TH420-4, TH420-6, TH520-4, TH520-6	24	16	18	50
B5-4x4, B6-4x4	5	1½	7	25
B5-6x6, B6-6x6	5	1½	10½	25
B5-6x4	5	1½	7	25
B6-6x4	6	1½	7	25
LD1, LD14	5	1½	1½	25
C5A4, C5B4, CSA-4, CSB-4, C5-4, C6-4	5	1½	3½	25
C5-6, C6-6 (1937)	5	1½	7	25
E5-4, E6-4, E5-COE-4 (1938)	5	1½	3½	25
E5-6, E6-6 (1938)	5	1½	7	25
LD3-4 (1939)	5	1½	1½	22
OOT2-4, OT2-4 (1939)	5	1½	1½	22
F5-4, FF5-4, F5-COE, FF5-COE-4, F6-4, FF6-4 (1939)	5	1½	3½	24
F5-6, FF5-6, F6-6, FF6-6 (1939)	5	1½	7	24
OSHKOSH				
WLD	7	23½	10½	28
WLX	7	23½	10½	28
JCB	6	11 L	8½ L	22
JD	6	11 L	8½ L	22
FC-35	10	30½	12 L	40
FS, FB, FC, FB-35	10	30½	12 L	40
B35	7	23½	10 L	28
B3D	7	23½	11 L	28
C35	10	30½	10 L	40
C3D	10	30½	12 L	40
R35	10	30½	19 L	40
FD	10	30½	25 L	40
BG3	20	20 L	25 L	64
GD	20	20 L	25½ L	64
REO				
4H5, 4J5, 4K5 (1936-37)	9	12 L	15 L	31
450 (1937)	4	2½ L	2	12
475 (1937)	4	2½ L	3½	12
650 (1937)	5	2½ L	2	14
675 (1937)	5	2½ L	3½	14
1A4, 1C4 (1937)	5	8 L	9	15½
1A4H 1C4H, 1B4 1D4 (1937)	6	8 L	9	19
1B4H 1D4H, 2B4 2D4 (1937)	6	8 L	9	19½
2H5 2J5 (1937)	6	12 L	9	19½
3H5 3J5 3K5, 3HR5 3JR5 3KR5 (1937)	6	12 L	15	25
450, 450L	4	2½ L	2 L	12
475, 475L	4	2½ L	3½ L	12
650, 650L	5	2½ L	2 L	14
675, 675L	5	2½ L	3½ L	14
1A4, 1C4	6	6 L	9 L	15½
1A4C, 1C4H, 1B4, 1D4 1B4H, 1D4H, 1BM7, 2BM7, 2B4, 2D4, 2L7M	6	6 L	9 L	19½
2J5, 2H5, 2L4H, 2L7MH 1L5	6	12 L	9 L	19½
3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5	6	12 L	15 L	25
4H5, 4J5, 4K5	9	(j) 12 L	15 L	31
3L6H	9	12 L	15 L	31
STERLING				
FB50 DeL. (1937-38)	8	3	4	22
FB60 DeL. (1937-38)	8	3½	4	22
FB70 DeL. (1937)	8	4	7	22
FC90 (1937-38)	8	4½	9	22
FBT130	8	5½	7	22
FB-80 (1937)	8	12	7½	32
FD90 (1937)	8	12	5½	32
FD97 (1937)	10	6	7½	36
FC135 (1937)	10	6	9	36
HC140 (1937)	10	6	9	44
FD115 (1937)	10	8	9	36
FC100 (1937)	8	6	9	34
HC170	14	7	10	48
HCS210 (1937-38)	14	7	6	48
FB70 (1938)	8	4	5½	22
FB80 (1938)	8	8	6	32
FD90 (1938)	8	8	5½	32
FD97 (1938)	8	6	8	36
FC135 (1938)	8	6	9	36
HC140 (1938)	8	6	9	44
FD115 (1938)	8	6	13	36
FC100 (1938)	8	6	9	36
HC200, HC185 (1938)	14	7	10	48
HC250 (1938)	14	(k) 7	10	48
FBT152 (1938)	8	8	6	32
FWS152 (1938)	8	8	10	32
FDS180 (1938)	8	6	12	36
MB75, MD75 (1939)	8	6	5½	40
MS75 (1939)	8	6	10	40
MB85, MD85	8	6	8	40

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY In Quarts Unless Marked L. Meaning Pounds				Cooling System Capacity (Gals.)
	Engine	Trans- mission	Rear Axle		
STERLING—Continued					
MB90, MD90, JB90, JD90, HBT128 (1939)	8	8		6	
HD105 (1939)	8	8		8	
HD110 (1939)	10	m		8	
HD115 (1939)	10	m		13	
JD135 (1939)	10	12		13	
JD137, HD145 (1939)	10	12		8	
HD165 (1939)	10	12		10	
HD175R (1939)	14	11		10	
HC105 (1939)	8	8		7n	
HC115 (1939)	10	m		7n	
JC137, HC147, HC165 (1939)	10	12		7n	
JC145, HC145, HC156 (1939)	10	12		8n	
HC175 (1939)	10	12		10n	
HC185 (1939)	14	11		10n	
HC200, HC250 (1939)	14	11		11n	
HW5128, HDS128 (1939)	8	8		5	
JWS160, JDS160 (1939)	10	12		6i	
HW52355, HDS2355 (1939)	10	12		10i	
HCS225	10	12		10n	
HCS255, HCS285, HCS300 (1939)	14	11		10n	
STEWART					
40A, 60A (1938)	4	3		1½	15
45A, 45AL, 45AS (1938)	6	3		3	18
47A, 50A (1938)	8	3		3½	24
50AS (1938)	8	3		5	24
49A (1938)	9	3		4	26
51A (1938)	9	3		4	24½
61A (1938)	4	3		3	18
58A (1938)	8	10		3	26
59A (1938)	8	10		5	26
38-B (1938)	8	10		5	26
31X (1938)	8	13		8	31
STUDEBAKER					
J5 (1937)	6		1½		13
J15, J15M, J15B (1937)	6	3	4		16
J20, J20M, J20B (1937)	6	3	5		21
J25, J25M, J25B (1937)	6	6	7		21
J30, J30M (1937)	7	6	6		23
K5 (1938)	5½	1½		¼	14
K10 (1938)	5½	1½	2		16
K15, K15B, K15M (1938)	5½	3	4		16
K20, K20M, K20MB (1938)	6	3	5		21
K25, K25M, K25MB (1938)	6	6	7		21
K30, K30M (1938)	7	9	6		23
WALTER					
FND	8	18		5	34
FMD, FKMD	10	18		5	34
FCKD, FCS	10	25		7	34
FBS, FBRS	14	25		7	32
WHITE					
60, 60K, 601, 602	13	4		5	25
61, 611, 612	13	4		8	26
618	14	11		4	28
620	22	4		4	32
620K	22	4		4	30
621	22	4		5	32
621K, 51AS, 63, 630, 630K, 631, 631K	22	4		5	30
640, 641 (1AB Engine)	28	6		5	30
640, 640K, 641 (5A Engine)	22	20		5	30
641K, 642, 643 (5A Engine)	22	20		6	30
642, 643 (1AB Engine)	28	6		6	30
642SW310	28	6		8½	30
642SW320	22	20		8½	30
643SW410	28	6	11	30	
643SW420	22	20	11	30	
65K	22	4		5	34
691	22	20		6	31
700, 700H	12	3½		4	23
700K	12	3½		6	23
701, 702	6	2		6	17
703, 704, 705	12	2½		6	22
704K	12	6		7	22
707	6	2		7	17
709 (11A Engine)	12	2½		7	22
709 (13A Engine)	12	6		7	25
712 (9A Engine)	9½	11		7	25
712 (16A Engine)	12	6		7	25
718	12	6		8	25
720, 720T, 722	18	13		8	32
750	12½	10		8	24
750T	12½	10		6	24
800, 802	6	4		4	9
805	12	4		6	23
809, 810, 812	12	6		7	25
818	12	6		8	25
820, 822	18	12		8	32
904	12	2¾		4	23
918	12	6		5½	25
920	18	13		6½	32
922	18	13		10i	32
942	22	20		10i	32
950	12½	10		5½	32
991	22	20		10i	31
WILLYS					
38, 48	4	¾		1	



We've never found a spark plug trouble THAT AC's COULDN'T CURE

More than half of the buses and trucks which will be built this year will be factory-equipped with AC Quality Spark Plugs. Most of America's best known fleets are now running on AC's. These facts are proof that AC's *meet the need*—of manufacturers and operators alike.

But, AC service to plug users goes still further. It covers even the rare case in which the specified type of plug faces *unusual* engine operating conditions. The AC Heat Range makes this possible.

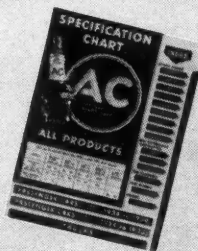
If engine conditions produce chronic preignition, rapid electrode wear, lower insulator breakage, or blow-by, the AC Heat Range enables you to go to a "cooler" plug, of the same thread size, which will cure the difficulty. If, on the other hand, engine conditions result in excessive fouling, the AC Heat Range licks that, too. It enables you to go to a "hotter" plug (same size), and thus cure the trouble.

Thirty years of spark plug experience have made full satisfaction for plug users possible—and practical. In fact, we've never been up against a spark plug requirement that AC's couldn't meet.

Use AC Spark Plugs for Better Engine Performance

CHECK PLUG TYPE AND HEAT RANGE WITH THIS FREE AC CHART

Your AC supplier will gladly furnish this AC Chart (Form A-681). It contains plug specifications and full information on the AC Heat Range. Ask for it.



- for Thirty Years
**THE QUALITY
SPARK PLUG**

International Trucks and Tractors, Allis-Chalmers Tractors; Diamond-T, White, GMC, and Chevrolet Trucks; Chevrolet, Pontiac, Packard, Oldsmobile, Nash, Buick, Cadillac and La Salle motor cars—these are some of the well-known tractors, trucks and cars which use AC Quality Spark Plugs as standard equipment. Trust your spark plug requirements to the same brand of spark plugs which the leading, big-volume manufacturers select.

TENSION

Specifications

FOR USE WITH

TENSION WRENCHES All readings are in "Foot-Pounds"

Engine Make	Cylinder Head	Main Bearings	Connecting Rod Bearings
CHEVROLET (1938) (Note 1) (1939)	67 78	106	
CONTINENTAL A6244 (Note 4) E600, E601, E602, E603, E610, E611, E612, E613 (Note 5) F124, F140 F162 (Note 4), F170, F199 F209, F218 (Note 4) F4124, F4140, F4162 (Note 4)	70-75 100-110 70-75 $\frac{3}{8}$ "-35-40 $\frac{1}{2}$ "-70-75 70-75	100-110 100-110 100-110 100-110 100-110	35-40 100-110 35-40 35-40 35-40

Engine Make	Cylinder Head	Main Bearings	Connecting Rod Bearings
CONTINENTAL F6170, F6199 F6209, F6218 (Note 4) M6271, M6290 M6330 (Note 6) 20R, 21R, 22R, 31R, 32R, 33R (Note 5)	(Cont.) $\frac{3}{8}$ "-35-40 $\frac{1}{2}$ "-70-75 70-75 100-110	100-110 $\frac{1}{2}$ "-100-110 $\frac{1}{2}$ "-130-140	35-40 70-75 100-110
DODGE (1938-39)	Nuts 53-57½ Plain head cap screws 65-70 Cupped head cap screws 67½-72½	75-80	53-57½

FORD (1938-39) (Note 2)	85 h.p. aluminum-40 60 h.p. aluminum-30 All iron-50		
GEN. MOTORS (1936-37-38) 216, 223, 230 239, 257, 286 331, 400, 450 479, 529, 707 228, 248 278, 308 361, 426, 451 Diesel: 3-71, 4-71, 6-71 (Note 3)	60-70 60-70 65-75 100-120 60-70 90-100 90-100 135-145	80-90 90-100 90-100 100-120 90-100 90-100 90-100 85-95	50-60 80-90 90-100 100-120 50-60 80-90 90-100 50-55

HERCULES NX, IX ZX OO QX JX WX YX, RX RXL HX DOO DJX DRX DHX	42 42 52½ 52½ 52½ 52½ 52½ 73½ 105 157½ 157½ $\frac{5}{8}$ "-175 1"-280 $\frac{1}{2}$ "-175 $\frac{1}{2}$ "-350	77 77 105 59½ 59½ 70 70 105 105 122½ 175 182½ 210 77 90 77 95 175 192½ 210	42 23 52½ 38½ 52½ 105 105 157½ 252½ 140 140 157½ 252½
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INTERN'L HARVESTER	$\frac{1}{2}$ "-56 $\frac{1}{2}$ "-67 $\frac{5}{8}$ "-93	$\frac{1}{2}$ "-75 $\frac{1}{2}$ "-75 $\frac{5}{8}$ "-93	$\frac{1}{2}$ "-56
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LYCOMING AFE, AEF, ASE BF	52½-56 49-52½		
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MACK CE, CF, CT, ED, EO, EP, EY BG, CU EN, II FK, FM, FO	114-118 86-81 60-61 50-52½	137-140 137-140 84-91 79-87	91-96 73-77 45-50 66-70
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REO S140, S209 S228, S3-268, S3L268, S5-309	60-61 83½-100	87-98 67-75	49-52½ 71-75
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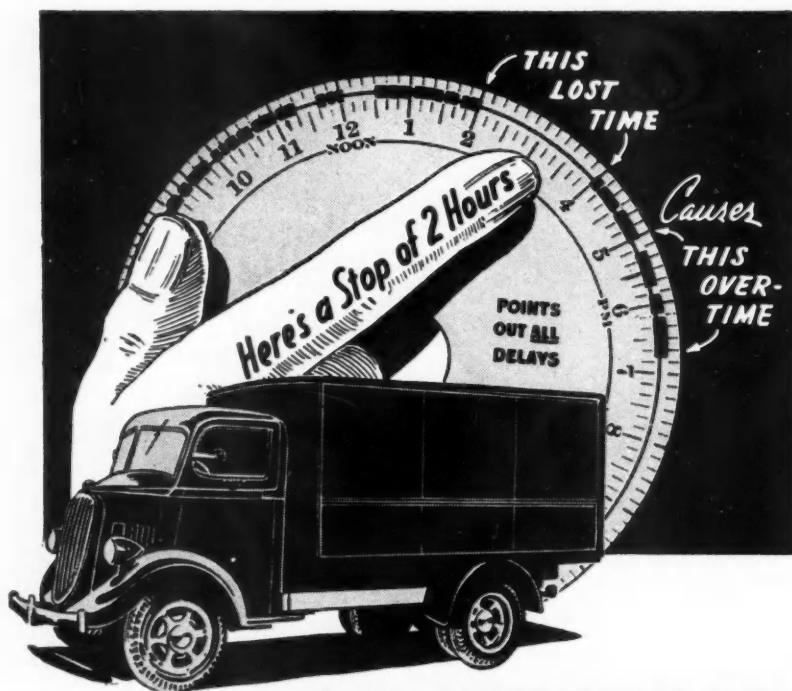
STUDEBAKER J5, J10, J15, K5, K10, K15	83	92	54
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WAUKESHA 6BK, 6MS, 6ML, 6MK, 6MZ, 6BKH 6-110, 6RS, 6SRL, 6SRK, 6-125, 6D100 6GAK 6RB, 6D140, 6DA140	65-80 65-80 90-110 90-110	65-80 90-100 100-120 90-110	45-55 45-55 45-55 45-55
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WHITE All Models	$\frac{3}{8}$ "-23-26 $\frac{1}{2}$ "-44-47 $\frac{5}{8}$ "-61-65 $\frac{1}{2}$ "-87-96 $\frac{3}{8}$ "-152-165		
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WILLYS 48 (1939)	60-65	65-70	50-55
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* Center and Rear. **Front and Intermediate.
Note 1—Rocker Arm Support 29 (1938), 27½ (1939).
Note 2—Spark Plugs $\frac{3}{8}$ "-18, cast iron.
Head 34-39, 18 mm. aluminum.
Head 24-29, 14 mm. aluminum.
Head 20-24, 14 mm. cast iron head 24-29.
Note 3—Injector crab nut 11. Note 4—Manifold 30-35.
Note 5—Manifold 100-110. Note 6—Manifold 70-75.



OVERTIME!

Is it a habit with your truck?

● One thing is certain—if your truck wastes an hour *during* the day, it will have to take an hour *after* closing time to get a day's work done. And that is what is happening with thousands of motor trucks.

If your truck is busy during the day and still has to work overtime, then pay your overtime cheerfully, and on the basis of the chart of the *Servis Recorder*. Don't have any more arguments about overtime. And don't have your trucks working after hours when they could finish everything *during* hours. The *Servis Recorder* will tell you on its chart the whole situation at a glance.

The *Servis Recorder*, by the way, is attached to any truck merely by a couple of ordinary screws or bolts. Over 100,000 trucks have been equipped already. Write for free Booklet: "Ten Ways of Getting More Work Out of Motor Trucks."



THE SERVICE RECORDER COMPANY
1422 EUCLID AVE. Branches in Principal Cities CLEVELAND, OHIO

The Servis Recorder

Tells Every Move Your Truck Makes



"My word, do they do this for Everyone?"

A letter from a visiting English woman to a friend back home.



I keep my hosts amused at my reactions to America. This morning she drove her car into a petrol station and for a moment I was sure the clerks mistook me for a duchess, at least! Polite young men bustled about doing all manner of helpful things unasked. There was no charge, and not one of the lads would take so much as a tip for a tip! They tell me it's all quite usual here, but

ONE of the things in America that strikes many visitors as "worth writing home about" is the service so cheerfully rendered by our gasoline dealers.

Even Americans are moved to pay it tribute. A prominent educator has said...

"The filling-station men have improved the manners and courtesy of the American public more than all the colleges in the country."

This super-service hasn't come about of itself. The only reason why the sale of gasoline is surrounded with more free and cheerful service than the sale of thread, eggs, or pretzels is that American petroleum companies haven't simply been content to make their products better and cheaper. They've worked just as hard to make those products convenient and pleasant to buy.

This is an American trait. It's one of the things that help make America a good country in which to live.

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 Gulf Building • Pittsburgh, Pa.

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 Every Sunday evening at 7:30 E.S.T. over C.B.S.

COMMERCIAL CAR JOURNAL
 APRIL, 1939

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HERE'S THE
TENSION WRENCH
FOR ME!**

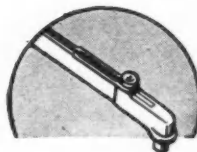
TORKFLASH

ONLY \$9.60
NET TO MECHANICS

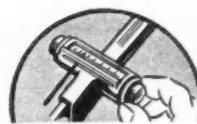
**FLASH
Signal Tells
When to
Stop Pulling**

PAT. PEND.

"I'VE tried 'em all — but TORKFLASH has everything. It's the greatest workin' tool I ever laid my hands on. I get a big kick out of using it — and seeing what a hit it makes with customers."



Small head of Torkflash is only 9/16" thick over all—gets into tight spots.



Desired tension is PRE-SET on unique 5-in-1 scale for direct reading in inch lbs., foot lbs., U.S.S. and S.A.E. bolt dia., and spark plug settings.

RIGHT YOU ARE, BOY!

Torkflash does have everything — positive FLASH signal — 5-in-1 direct-reading tension scale (no mathematics)—light weight, only 22 ounces — compact, 16½" length — small head, gets into tight spots — choice of two drives, 7/16" and 1/2", both equipped with exclusive "LOCK-ON" for sure grip on sockets. Beautiful bakelite box FREE with each Torkflash. Order from your jobber salesman — NOW!

A Product of BLACKHAWK MFG. COMPANY
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BLACKHAWK
Wrench Specialists

I.C.C. SAFETY REGULATIONS

Parts I to IV of the safety regulations prescribed by the Interstate Commerce Commission under the provisions of the Federal Motor Carrier Act are currently undergoing revision. For that reason they are not published in this issue. Until the revised provisions are adopted and prescribed by the I.C.C., when they will be published in full in Commercial Car Journal, readers wishing to refer to Parts I, II, III and IV are directed to the April, 1938 Reference Annual issue of Commercial Car Journal.

Part V, dealing with Hours of Service of Drivers, has been revised and prescribed and is here published in full:

PART V. HOURS OF SERVICE OF DRIVERS Effective March 1, 1939

Rule 1

As used in these regulations:

(a) The term "motor vehicle" means any vehicle, machine, tractor, trailer, or semi-trailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof determined by the Commission, but does not include any vehicle, locomotive or car operated exclusively on a rail or rails.

(b) The term "driver" means any individual who drives in transportation in interstate or foreign commerce any motor vehicle as defined in paragraph (a) above.

(c) A driver is on duty from the time he begins to work or is required to be in readiness to work until the time he is relieved from work and all responsibility for performing work. Time spent by a driver resting or sleeping in a berth as defined in paragraph (g) of this rule shall not be included in computing time on duty.

(d) The term "drive or operate" includes all time spent on a moving vehicle and any interval not in excess of 10 minutes in which a driver is on duty but not on a moving vehicle. It does not include time spent resting or sleeping in a berth as defined in paragraph (g) of this rule.

(e) The term "week" means any period of 168 consecutive hours beginning at the time the driver reports for duty, as defined in paragraph (c) of this rule.

(f) The term "24 consecutive hours" means any such period starting at the time the driver reports for duty, as defined in paragraph (c) of this rule.

(g) The term "berth" means a berth or bunk on the motor vehicle which is properly equipped for the purpose of sleeping, including springs and a mattress, or an inner-spring mattress, pillow, adequate bed clothing, adequate ventilation, and ready means of entering and leaving the berth.

(h) Where any other term used in these regulations are defined in section 203 (a) of the Motor Carrier Act, 1935, such definitions shall be controlling. Where terms are used in the regulations which are neither defined herein nor in said section 203 (a), they shall have the ordinary practical meaning of such terms.

Rule 2

Every motor carrier and his or its officers, agents, employees, and representatives shall comply with the following regulations, and every such motor carrier shall require that his or its officers, agents, employees, and representatives shall be conversant with these regulations.

Rule 3

(a) No carrier subject to these regulations shall permit or require any driver in his employ to remain on duty, as defined in paragraph (c) of rule 1, for a total of more than 60 hours in any week, as defined in paragraph (e) of rule 1; provided, however, that carriers operating vehicles on every day of the week may permit drivers in their employ to remain on duty for a total of not more than 70 hours in any period of 192 consecutive hours.

(b) Except under conditions set forth in rule 6 (a) and (b) hereof, no carrier subject to these regulations shall permit or require a driver in his employ to drive or operate for more than 10 hours in the aggregate in any period of 24 consecutive hours, unless such driver be off duty for 8 consecutive hours during or immediately following the 10 hours aggregate driving and within said period of 24 consecutive hours; provided, however, that two periods of resting or sleeping in a berth, as defined in paragraph (g) of rule 1, may be cumulated to give the aforesaid total of 8 hours off duty.

Rule 4

No carrier subject to these regulations if himself a driver shall remain on duty or drive for longer periods than those prescribed in rule 3 hereof for employed drivers.

Rule 5

(a) Each carrier subject to these regulations shall require that a driver's log in duplicate shall be kept by every driver in his employ who operates a motor vehicle engaged in transportation in interstate or foreign commerce, and, if himself an owner-driver, shall keep such a log. Entries in said driver's log shall be made by the driver, and shall show the place or origin and destination of the trip, the times of reporting for duty and of going off duty, the periods of driving or operating and other work, and any other information found desirable; provided, however, that the foregoing provisions of this rule shall not apply to drivers engaged in the transportation of passengers or property in interstate or foreign commerce wholly within a municipality or between continuous municipalities.

(b) Each carrier shall make monthly reports to the Bureau of Motor Carriers, Interstate Commerce Commission, Washington, D. C., prior to the fifteenth day of each succeeding month, of every instance where a driver has been required or permitted to be on duty or to drive or operate for hours in excess of those prescribed by these regulations, and shall fully explain the reasons for and circumstances surrounding such violations. Such reports shall be in writing and sworn to.

Rule 6

(a) In case of snow, sleet, fog, or other adverse weather conditions, or in case the highways are covered with snow or ice, or presence of unusual adverse road and traffic conditions, a driver may be permitted and required to drive or operate a motor vehicle for not more than 12 hours in the aggregate in any period of 24 consecutive hours in order to complete his run, without being off duty for a period of 8 consecutive hours as provided by rule 3, and this longer period of driving is permitted even though conditions named herein are known to the employer before the trip is begun.

(b) If a driver is permitted or required under the provisions of subdivision (a) of this rule to drive in excess of 10 hours in the aggregate in any 24-hour period without being off duty for a period of 8 consecutive hours during or immediately following the period of 10 hours driving and within said period of 24 consecutive hours, a report must be made immediately to the Commission, addressed to the district office of the Bureau of Motor Carriers of the district in which the carrier's headquarters is located, and such report shall contain a full and correct statement of the conditions which necessitated the longer period of driving.

(c) In case of any emergency a driver may complete his run without being in violation of the provisions of these regulations, if such run could reasonably have been completed without such violation.

Rule 7

These regulations shall not apply to any carrier subject thereto when transporting passengers or property to or from any section of the country with the object of providing relief in case of earthquake, flood, fire, famine, drought, epidemic, pestilence, or other calamitous visitation or disaster.

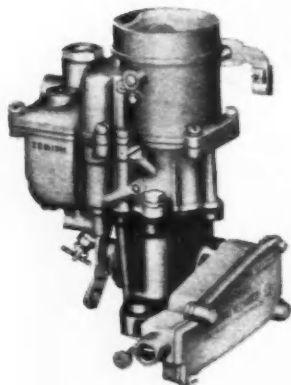
COMMERCIAL CAR JOURNAL
APRIL, 1939

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DRIVERS

HOURS of Service

As prescribed by state laws and regulatory authorities
Detailed I.C.C. regulations will be found on page 74



Better Carburetion—Better Governing

Zenith now combines a most accurate governor with the famous Zenith Carburetor to give fleet operators advantages in efficiency and economy never possible with separate installations.

This perfectly matched combination unit simplifies and improves governor control. Positively eliminates cheating by throttle manipulation. Provides smooth, sharp governing action at all times. You get good fuel distribution—with instant acceleration and smooth, even power, regardless of road, load or grade. Requires practically no more room than a standard carburetor.

Here's a 2-in-1 unit that's cutting operating costs for scores of fleets. Downdraft and updraft types to fit most popular engines. Better investigate now.

ZENITH CARBURETOR DIVISION
Bendix Aviation Corporation
696 Hart Ave. Detroit, Mich.

ZENITH

Combination

CARBURETOR AND GOVERNOR

State	Vehicles Affected	LIMIT, ON DUTY		
		When Consecutive	When Not Consecutive (Hr. Period Allow.) in Hr.	Min. Off Duty Hr.
Ala.	Common Contract	8	8 in 12	8
Ariz.	Motor and Private Property Carriers	10	10 in 24	8
Ark.	All Carriers*	12	14(2) in 24	8
Calif.	Pass. Com. Carriers	10	10 in 15	9
	Prop. Com. Carriers	10	10 in 15	
	Oth. For-Hire Pass.*	10	10 in 15	8
	Other Prop. Carr.*	12	12 in 15	8
Colo.	Common Carriers*	12	10 in 24	8
Conn.	Commer. & Public	12	16(8) in 24(3)	8
Del.	Commer. (Tr. & Bus)	8*	16 in 24	
D. C.	Buses (Reg. Route)	12		8
Fla.	For-Hire	12(9)		8
Ga.	For-Hire Carriers	10	14 in 24	10
Idaho	Transportation Cos. (Common)*	8	10 in 24	
Ill.	Common Carriers	10	10 in 16	8
Ind.	Com. & Contract	8	14 in 24	
Iowa	For-Hire*	12(3)	12 in 24	8
Kan.	Com., Cont., Private Same, Sleeper Cabs	12(15)	16 in 24(2)	
Ky.	Com. and Contract	36		12
La.		12	16(8) in 24(3)	8
Me.	Property For-Hire	No	Limitations	
Md.		No	Limitations	8
Mass.	Motor Buses	10	10 in 16	
	Property For-Hire	12	16(8) in 24(3)	8
Mich.	Com. and Contract*	12	12 in 24(4)	10
	Trucks	12	12 in 14	10
Minn.	For-Hire Trucks*	12		
Miss.	Tr., Bus Operators*	12	16 in 24	
Mo.	All Carriers*	10		10
Mont.	Motor Carriers*		8 in 24	8
	Buses		8 in 24	12
Neb.	Motor Carriers		12 in 24	
Nev.	For-Hire*	12	12 in 15	8
N. H.	For-Hire Trucks	12	16(8) in 24(3)	8
N. J.	Commer. (Tr., Bus.)	12(12)	12 in 16(12)	8
N. M.	For-Hire	10(4)	16(8) in 24	
N. Y.	Trucks and Buses	10(14)	10 in 14	8
N. C.	Franchise Holders	7	14 in 24(7)	
N. D.	Com. and Cont.	10	10 in 24	10
Ohio	Bus Drivers		14 in 24(6)	
	Truck Drivers	14	14 in 24	8
Okla.	Motor Carriers*		10	8
Ore.	Motor Carriers*	12	12 in 24	
Pa.		No	Limitations	
R. I.	Mec. or Pub. Serv.	12	16(8) in 24(3)	8
S. C.	Motor Carriers (10)		10 in 24*	8
	Truck Operators		8* in 24 (8)	
S. D.	Motor Carriers	12	12(8) in 24(4)	12
Tenn.	Motor Carriers		12 in 24	8
	(63 driving hours in any 7 day period)	14	14 in 24	8
Utah	Trucks	8	10 in 15	
Vt.	Motor Carriers	No	Limitations	
Va.	Common Carriers		8 in 24	10
	Motor Vehicles*		13 in 24	
Wash.	Mot. Frt. Carriers	10	10 in 24	8
	Pass. Com. Carriers		10 in 24	8
W. Va.		No	Limitations	
Wis.	Motor Carriers		12(13) in 24	8
Wyo.	Motor Carriers	10	14 in 24(3)	8
Fed'l (ICC)	Intestate Com & Cont.		10(16) in 24	

- (1)—Or drive a passenger carrier vehicle over 275 miles.
- (2)—If 2 hours rest period provided.
- (3)—Must be followed by 10 consecutive hours off duty.
- (4)—Must be followed by 8 consecutive hours off duty.
- (5)—60 hours in 7 consecutive days.
- (6)—Or drive a passenger coach more than 300 miles in continuous service or 1500 miles in any week.
- (7)—9 hours at end of two 7 hour periods with one hour rest intervening.
- (8)—No period off duty shall be deemed to break the continuity of service unless it be for at least 3 hours.
- (9)—Periods of not less than 4 hours off duty not to be counted in 12-hour period.
- (10)—Bus operators 55 hours in any 7 consecutive days.
- (11)—No period off duty shall be deemed to break the continuity of service unless it be for not less than 2 hours at a place where food and lodging may be secured.
- (12)—Time taken for meals not counted in time on duty.
- (13)—60 hours per calendar week and 40 hours maximum for any four consecutive days.
- (14)—Includes time for meals.
- (15)—72 hours in 7-day period or 96 hours in such period if a sleeper cab.
- (16)—12 hours permitted in adverse weather or traffic conditions. 60 hours in any week of 163 consecutive hours, or 70 hours in any 192 consecutive hours.

*—Limit is actual driving hours
Tr—Truck. Com—Common. Cont—Contract.

New Battery Corporation Formed

Ward S. Perry for 27 years with the Vesta Battery Corp. has organized a new concern known as the Volta Battery Corp. with headquarters at 1627 S. Michigan Ave., Chicago. A complete line of Volta batteries is in production.

Wagner

has everything for complete HYDRAULIC BRAKE REPAIRS



WAGNER LOCKHEED PARTS

Be prepared to completely service your hydraulic brakes by having on hand a Wagner Lockheed parts assortment . . . Available in 1, 4, 12 and 18-drawer cabinets . . . there's a size just suited to your needs.



MOTOR AND HONE DRIVE

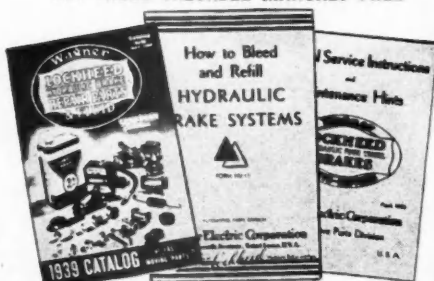
For cylinder honing. The motor is totally enclosed to overcome fire hazards and furnishes a seal against extraneous matter. This unit does not include hones.



HONING SET

Consists of three hone bodies, 30 honing stones, which include cutting, polishing, and wiper stones. Also one drill press adapter, six discs for honing step-bore cylinders, and five sizes of retaining springs, with two of each spring size furnished. This hone set will hone wheel and master cylinders ranging from $\frac{1}{8}$ " to 2" in diameter.

GET THESE VALUABLE MANUALS FREE



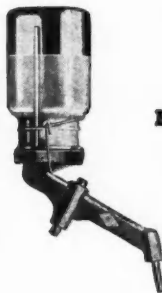
Make your Brake Service Department 100% efficient. Send for these valuable books. HU-39 is an outstanding catalog of complete, fast-moving hydraulic brake parts. HU-17 is a valuable bleeder manual. SD-344B covers servicing of all makes of hydraulic brakes.

You can lower your brake maintenance cost on your rolling stock by equipping your repair shop with Wagner hydraulic brake parts and tools.

Wagner is constantly developing new brake equipment to help you cut service costs — new assortments of hydraulic brake parts — new hones and gauges — new service accessories. A few of the many assortments and tools Wagner offers you, are described herewith.

HYDRAULIC PRESSURE BLEEDER TANK

Saves fluid—flushes the system free of sludge and sediment, and leaves it recharged with fresh, clean fluid. The air-pressure in the bleeder tank eliminates the necessity of pumping the brake pedal and using an extra man.



AUTOMATIC BRAKE CYLINDER REFILLER

Fully automatic—cannot fill master cylinder beyond proper level. Cylinder cannot be pumped dry, nor can air enter system. Assures convenient, reliable job.



WAGNER LOCKHEED HYDRAULIC BRAKE FLUID

No. 21 is an all-weather fluid . . . One type meets all needs . . . Not affected by heat or cold encountered in operation of automobiles . . . Mixes readily . . . None better at any price . . . Available in pint, quart, gallon and 5-gallon containers.



HYDRAULIC BRAKE CYLINDER CLAMP

Essential when relining hydraulic brakes. Saves time and eliminates the necessity for line bleeding. Sold in sets of four.



NO-GO GAUGES

The use of the No-Go Gauges will eliminate the possibility of over-size cylinder bores. Castings which are honed large enough to permit the gauge to enter should be scrapped. Sizes $\frac{1}{8}$ " to 2".

Clip and Mail this Coupon Today!

AUTOMOTIVE PARTS DIVISION
Wagner Electric Corporation St. Louis, Mo., U.S.A.

Send information on items checked . . . ☐ Wagner Lockheed Hydraulic Brake Parts . . . ☐ No. 21 Fluid . . . ☐ Service Tools and Equipment . . . ☐ "How to Bleed and Refill Hydraulic Brake Systems" . . . ☐ Service Manual SD 344 B.

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ADDRESS.....

CITY.....STATE.....

I buy regularly from (Jobber's name).....

CCJ H 39-8A

Tire & Rim Yearbook

The 1939 yearbook of the Tire & Rim Association is now available at \$2.00 per copy. Complete data including maximum load carrying capacity and recommended pressures for all size tires, clearance standards, dual wheel mounting, etc., may be found within its pages.

Butane Used at Shasta Dam

Pacific Constructors Inc., contractors for the construction of Shasta Dam near Redding, Cal., have equipped their 69 trucks with butane-propane equipment furnished by the Ensign Carburetor Co. Ltd. The conversion of 51 Macks and Fords was

made at the dam site and 18 new Models 191 White trucks with 24-yd. bodies were equipped at the factory branch in Los Angeles. These 24-yard trucks are equipped with 96-gal. butane tanks and have a fuel consumption of 4 gal. per hour.

The decision to use Butane was influenced by the successful operation with this fuel at Imperial, Boca and Prado Dam sites, all in California.

Lincoln Opens Seattle Branch

The Lincoln Electric Co. has opened a factory branch office at 1914 Utah Ave., Seattle, Washington. A large stock of electric welders, electrodes and supplies will be maintained.



ENGINEERED

for your satisfaction... *marked*
for your protection!

We're jealous of the reputation of the Bendix Drive in the service of car and truck owners the world over. Each of its few sturdy parts is designed, dimensioned, engineered to its particular function, with the experience of millions in use as a guide.

When you have occasion to re-

place an old Bendix Drive, replace it with a *genuine* new Bendix Drive. When you renew a Bendix Drive part, use a *genuine* new Bendix part. The name BENDIX is stamped into every replacement part to protect you and to assure you of positive satisfaction. Stub-

bornly refuse any part without it!

ECLIPSE MACHINE DIVISION
BENDIX AVIATION CORPORATION
ELMIRA, NEW YORK

Only Bendix
Builds the

BENDIX DRIVE

When writing to advertisers please mention Commercial Car Journal

TRUCK Transmission RATIOS

MAKE AND MODEL	GEAR RATIOS (to-1)						
	Low	Second	Third	Fourth	Fifth	Reverse	Overdrive
BROWN-LIPE							
221	1.00						.75
222	1.52	1.00					
231							.75
232	1.52 ^c						
703	2.62	1.00	.75				.75
2341	6.27	3.04	1.65	1.00		7.53	
3221	1.00						.79
3222	2.15	1.00					
3241	7.00	3.90	1.86	1.00		8.10	
3341	6.30	3.51	1.68	1.00		7.29	
3440	3.87	1.86	1.00	.73		4.48	.73
3481	8.31	4.00	3.87	2.15	1.86	9.62 ^d	.73
5221	1.00	2.34					
5222	2.34	1.00					
5241	7.15	3.45	1.83	1.00		8.13	
5251	7.15	3.45	1.83	1.00	.80	8.13	.80
5341	6.63	3.20	1.70	1.00		7.53	
5351	6.63	3.20	1.70	1.00	.74	7.53	.74
5352	7.70	4.85	2.56	1.43	1.00	7.80	
5440	3.90	1.88	1.00	.75		4.43	.75
6031	2.22	1.00	.69				.69
7241	7.10	3.89	1.96	1.00		9.24	
7341	6.27	3.43	1.73	1.00		8.15	
7351	6.27	3.43	1.73	1.00	.67	8.15	.67
7440	3.72	2.04	1.00	.77		4.84	.77
2321	1.00						.75
2323	1.58	1.00					
2441	6.12	3.10	1.70	1.00		7.27	
2452	7.12	4.20	2.33	1.66	1.00	7.45	
2453	6.12	3.62	2.00	1.00		6.40	.80
CLARK							
140T	3.46	1.71	1.00			4.25	
204V	7.58	4.38	3.05	1.72	1.00	7.51	
204VO	6.06	3.50	1.80	1.00		6.00	.80
272V	7.88	4.46	3.09	1.74	1.00	a	
272VO	7.00	3.97	1.81	1.00		b	.79
326V	8.05	4.34	2.71	1.67	1.00	c	
326VO	6.51	3.51	1.75	1.00	.77	d	.77
FULLER							
5A & F-620	7.07	3.50	1.72	1.00		e	.77
5-M-620	7.07	3.50	1.72	1.00		e	.77
8A & AM-86	14.83	7.42	6.54	3.99	3.27 ^f	g	
8B & BM-86	12.56	7.42	6.54	3.99	3.27 ^f	h	
8A & AM-880	8.44	4.22	3.72	2.27	1.86 ^f	k	.76
8B & BM-880	7.14	4.22	3.15	2.27	1.86 ^f	l	.76
UR & AR-1.63	1.63	1.00				No	
2-A-53	2.08	1.00				No	
2-B-53	1.33	1.00				No	
3-A-96	1.99	1.00				No	.77
4-A & AM-96	6.54	3.27	1.76	1.00		7.24	
4-A & AM-960	3.72	1.86	1.00			4.11	.76
4-B & BM-96	5.54	3.27	1.76	1.00		6.58	
5-A & B & M-33	7.53	4.30	2.52	1.42	1.00	7.37	
5-A & B & M-330	6.10	3.48	2.04	1.00		5.96	.76
5-A & M-43	8.03	4.61	2.46	1.41	1.00	m	
5-A & F & M-430	6.52	3.33	1.77	1.00		n	.77
5-A & F & M-62	6.08	4.67	2.62	1.38	1.00	o	
NEW PROCESS							
36710	3.30	1.78	1.00			4.30	
36750, 36760	6.40	3.09	1.69	1.00		7.82	
WARNER GEAR							
T9	6.40	3.09	1.69	1.00		7.82	
T9A	5.90	3.09	1.69	1.00		7.21	
T84D	2.66	1.56	1.00			3.55	
T88-R7	2.57	1.55	1.00			3.48	.72
WATSON-							
BROWN-LIPE							
2231	1.52	1.00	.77				.77
2239	1.97	1.00	.77				.77
2322	1.96	1.00					
2321	1.00	.77					.77
5531	2.00	1.00	.77				.77
6031	2.14	1.00	.69				.69
703	2.62	1.00	.74				.74
21	1.00	.75					.75
22	1.58	1.00					
23	2.08	1.00					
31	1.50	1.00	.75				.75
39	1.92	1.00	.75				.75

^c—Others also.

^f—Also without overdrive.

a—High, 4.37; Low, 7.88.

b—High, 3.90; Low, 7.00.

c—High, 4.07; Low, 8.05.

d—High, 3.29; Low, 6.51.

e—High, 3.55; Low, 7.11.

f—Sixth 2.27; 7th, 1.76.

g—High, 7.24; Low, 16.42.

h—High, 6.58; Low, 14.92.

i—Sixth, 1.72; 7th, direct.

k—High, 4.11; Low, 9.32.

l—High, 3.74; Low, 8.48.

m—High, 4.71; Low, 8.00.

n—High, 3.33; Low, 6.50.

o—High, 4.74; Low, 8.12.

COMMERCIAL CAR JOURNAL
APRIL, 1939



Reduce
Maintenance
and **Operating**
Costs with

NITRICASTIRON CYLINDER SLEEVES!



● Unretouched photograph showing cutaway section of a Thompson Nitricastiron Sleeve after 94,600 miles of service in a Dodge K-47.

Walls as sleek as a polished diamond! Wear in ring travel less than .0005!

HARDNESS
800 TO 1000
BRINELL!

Engines go further without reconditioning—200,000 to 400,000 miles is common experience with Thompson Nitricastiron Sleeves.

Piston Rings last longer—3 times longer on the average in Nitricastiron Cylinders.

Oil Consumption is cut! The M&G Convoy Company, Buffalo, cut oil consumption of 18 to 25 quarts on a 400 mile trip to an average of 2 quarts after Nitricastiron Sleeves were installed.

A Washington operator says: "We

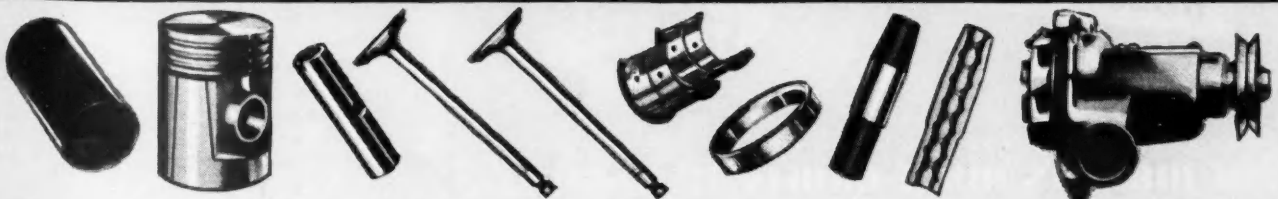
think so highly of your Nitricastiron Sleeves, Aerotype Valves and Pistons that their use has become one of our 'Standard Practices'." A trucking company in San Francisco installed Nitricastiron Sleeves in their trucks. One engine taken down showed "negligible sleeve wear of only .003 after two year's service." A Tennessee Utility Co., finds "the Nitricastiron Sleeve is worth cost of installation from point of oil economy and life from pistons and overhaul jobs."

These Thompson Parts give super service: Nitricastiron Cylinder Sleeves, Aerotype Pistons, Chrome Plated Piston Pins, Aerotype Valves, Duracrome Valve Seats, Graphited Valve Guides, Packless Pumps. Put these units into your jobs that see toughest service. They write their own story of phenomenal service and savings.

THOMPSON PRODUCTS, INC. • CLEVELAND • DETROIT



Thompson Products



DiVco Patents Upheld

The DiVco-Twin Truck Co., Detroit, Mich., has recently obtained further recognition of its patents in the house-to-house delivery field. DiVco has granted a license under patents owned by it to The White Motor Co., for the manufacture of the "White Horse." Seventeen other truck manufacturers and body builders have ceased building the stand-drive or low through-aisle vehicle and have compensated DiVco for past infringement.

Wheeler Condemns Biased Regulation

Federal regulation of competitive forms of transportation "does not mean and

should not mean regulation of them for the benefit of the railroads," said Senator Wheeler, chairman of the Senate Interstate Commerce Committee in a recent address. "On the contrary," he declared, "all regulation must be based upon a just regard for the needs of the public and for the rights of the employees and owners of those forms of transportation."

National Safety Congress

The 1939 National Safety Congress and Exposition, world's biggest annual safety event, will be held in Atlantic City, N. J., Oct. 16-20.

YOUR PULSE TELLS MANY FACTS

... to the Doctor

BOWSER
AKRAFLO
FUEL CONSUMPTION METER...
the pulse of the motor

TELLS ALL THE FACTS about FUEL CONSUMPTION... TO YOU

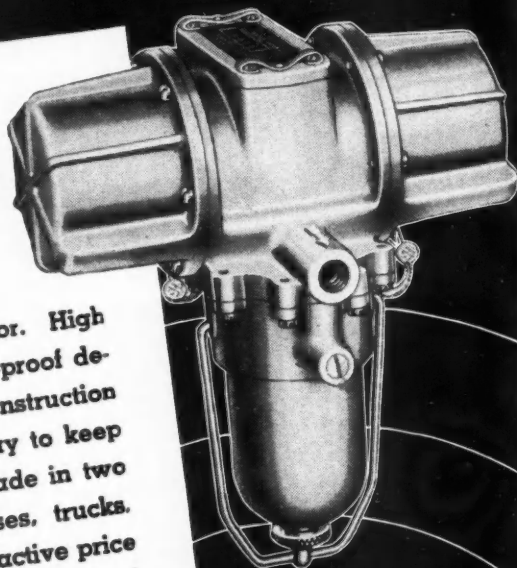
To know all about fuel consumption — to check drivers and motors — to secure valuable cost data — install **AKRAFLO** — the pulse of the motor. High accuracy... tamper-proof design and sturdy construction make it the ideal way to keep fuel costs down. Made in two models... for busses, trucks, taxis, etc. At its attractive price — you need it. Get full facts!

S. F. BOWSER & CO., Inc.
1358 Creighton Avenue
FORT WAYNE, INDIANA

TO CHECK FUEL CONSUMPTION ACCURATELY . . .

CHECK it at the MOTOR.

MADE BY THE MAKERS OF
THE WORLD'S MOST WIDELY USED METER



CLUTCH

SPECIFICATIONS

MAKE AND MODEL	Rated Torque Capacity (Lb. Ft.)	Type	Diameter of Facing		Number of Facings	Means of Adjustment	Bell Housing (S. A. E. No.)
			Outside (In.)	Inside (In.)			
BORG & BECK							
9A-7	130	SP	9 1/4	6	2	No	5
9A-6	130	SP	9 1/4	5 5/8	2	No	5
10A-6	160	SP	10	6	2	No	5
11A-6	195	SP	11	6 1/2	2	No	4
12-O & QL	200	SP	11 7/8	7 1/4	2	Sc	3
13-O	260	SP	12 1/2	7 1/4	2	Sc	3
14-Q	375	SP	13 3/4	7 1/4	2	Sc	2
BROWN-LIPE							
12-SP	Var	SP	11 7/8	7 1/4	2	Shs	2,3,4
13-SP	Var	SP	12 1/8	7 1/4	2	Shs	1,2,3
14-SP	Var	SP	13 3/4	7 1/4	2	Th	1,2,3
13-2P	Var	DP	13	7 1/4	4	Th	1,2,3
14-2P	Var	DP	13 3/4	7 1/4	4	Th	1,2
LIPE, W. C.							
Z34S	210	SP	11 7/8	7 1/4	2	Shs	3+
Z30S	270	SP	12 1/8	7 1/4	2	Shs	3+
Z32S	340	SP	13 3/4	7 1/4	2	Shs	3+
Z31S	425	SP	13 3/4	7 1/4	2	Shs	3+
Z42S	450	SP	15	8	2	Shs	2+
Z40S	615	SP	15	8	2	Shs	2+
Z40S	600	DP	12 1/2	7 1/4	4	Shs	2+
Z38S	1000	DP	15	8	4	Shs	2+
LONG							
8 1/4-CB	125	SP	8 1/4	6	2	No	6+
9-CF	135	SP	9	5 1/4	2	No	5+
9 1/2-CF	150	SP	9 1/2	6	2	No	5+
10-CF	160	SP	10	6	2	No	5+
11-CF	185	SP	11	6 1/2	2	No	4+
12-CB	250	SP	12	7	2	No	3+
29-A	225	DP	9 1/4	6 1/4	4	No	4+
31-A	300	DP	11	6 1/2	4	No	4+
34-BD	550	DP	13 3/4	7 1/4	4	No	2+
13-6	350	SP	13 3/4	7 1/4	2	Sc	2+
15-4	500	SP	15 1/4	9	2	Sc	1+
17	600	SP	16 1/4	10	2	Sc	1+
ROCKFORD							
8-11	98	SP	7 1/4	5 1/2	2	SCL	4.5
9-11	145	SP	8 1/4	5 1/4	2	SCL	2,3,4,5
12-11	347	SP	11 1/8	6 1/2	2	SCL	2,3,4
14-11	590	SP	13 3/4	8	2	SCL	1,2,3
9-TT	210	SP	9	5 1/4	2	Sc	2,3,4,5
10-TT	225	SP	9 1/2	5 1/2	2	Sc	2,3,4,5
11-TT	320	SP	10 1/2	6 1/2	2	Sc	2,3,4
12-TT	540	SP	11 1/8	6 1/2	2	Sc	2,3,4
14-TT	635	SP	13 3/4	8	2	Sc	1,2,3
15-TT	920	SP	15	8	2	Sc	1,2,3
18-TT	1960	DP	17 1/2	9 1/2	4	Sc	0.00
9-RM	115	SP	8 1/4	5 1/4	2	SCL	2,3,4,5
10-RM	175	SP	9 1/2	6 1/2	2	SCL	2,3,4,5
11-RM	310	SP	10 1/2	6 1/2	2	SCL	2,3,4
15-Q	690	SP	15	8	2	1.2,3	

+—And larger.

DP—Double plate, dry.

No—None.

Sc—Screws on cover plate.

SCL—Screws on clutch lever.

Shs—Shims.

SP—Single plate, dry.

Th—Threaded ring.

Operation Costs Down 40%

Since 1925 the operating cost of a popular priced car has come down 40 per cent according to data furnished by six companies operating a total of 30,000 vehicles and compiled by the Automobile Manufacturers Association.

Although gasoline mileage showed virtually no change, oil consumption dropped 30 to 70 per cent, tires showed a mileage increase up to 83 per cent, and engine overhaul has been postponed from 30,000 to 60,000 miles or longer according to the fleet reports.

TRAILMOBILE



**WITH THE MOST
PRACTICAL TRAILER BODY**

In every smallest part of this superior trailer body is built a rugged strength that assures cargo safety and many years of economical operation. From every view point—light weight, maximum strength, greatest durability, large capacity and moderate price — it is the most practical cargo container to reduce operation and maintenance costs and to increase net profits.

THE TRAILER COMPANY OF AMERICA
CINCINNATI, OHIO



This is the kind of material in the side panel of your Trailmobile Corrugated Body. The combined weight of fourteen men—a total of 2156 pounds—deflects the standard corrugated panel only $2\frac{1}{4}$ " The corrugated panel, as designed by Trailmobile, is the strongest and lightest for trailer body construction.

*The Easiest Pulling
Trailer on the Road*

Rail Authority Says Traffic Drop, No? Competition, Is Rail Problem

Loss of \$1,500,000,000 in railroad revenue between 1929 and 1936 merely continued a trend that started as early as 1920, before competition was a real factor, according to S. R. Truesdell, special assistant, president's office, Chicago and Northwestern Railway Co.

Writing in Traffic World, Mr. Truesdell says:

"It will be seen that, with a decrease of about \$1,500,000,000 in revenue (between 1929 and 1936), the only increase in any competitive form of transport was by motor vehicle, which increased less than

\$100,000,000. The only inference that can be drawn is that there is a decrease in traffic as a whole, and the causes and cures become more fundamental and serious than those due to mere competition."

Autocar Gets N.Y.C. Order

Robert P. Page, Jr., president of the Autocar Co., Ardmore, Pa., reports an order for 155 unusually large, heavy-duty Autocar trucks from the Department of Sanitation of the City of New York. The order specifies the engine-under-the-seat type of Autocar and indicates that they will be equipped with fully enclosed refuse collection bodies.



New EBERHARD HANGER for Sliding Doors

This new Eberhard all-steel sliding-door hanger is furnished with a husky flat-faced roller that runs on a $\frac{1}{4}$ -inch track. These ample dimensions reduce the effect of wear on roller and track and insure easy, smooth operation of doors throughout the life of the truck. You will like the simplicity, economy and sturdy efficiency of this new Eberhard hanger. Try it on your next sliding-door job. Furnished with ball-bearing roller, No. 6120, or with plain roller, No. 6121. For further information see your dealer or write direct to

EBERHARD MANUFACTURING CO.
Division of the Eastern Malleable Iron Co.
CLEVELAND, OHIO

EBERHARD

TRUCK BODY FITTINGS

Send for Complete Catalog

Long Run

E

Refrigeration Data

Thermal Conductivity of Insulating Materials

Thermal conductivity of various insulating materials per hour per square foot per degree Fahrenheit per inch of thickness.

Alfol (Alfol Insulation Co.)	.28
Balsam Wool (Wood Conversion Co.)	.246
Corkboard (Armstrong Cork Co.) 5.4 lb. per cu. ft.	.25
Corkboard (Armstrong Cork Co.) 7 lb. per cu. ft.	.27
Corkboard (Armstrong Cork Co.) 10.6 lb. per cu. ft.	.30
Corning Wool (Armstrong Cork Co.) 1 1/2 lb. per cu. ft.	.27
Corning Wool (Armstrong Cork Co.) 3 lb. per cu. ft.	.24
Dry-Zero blanket	.24
Dry-Zero Sealpad	.24
Ferro-Therm (American Flange & Mfg. Co.)	.228
Lata-Balsa (Balsa Wood Co.)	.31

Carrying Temperatures of Commodities Transported in Trucks

UNFROZEN	
VEGETABLES	ORANGES
Asparagus	33-34
Beans (green)	33-34
Beets	32-40
Broccoli	32-34
Cabbage	32-36
Carrots	32-36
Cauliflower	32-34
Celery	32-34
Corn (green)	36-38
Cucumbers	36-40
Lettuce	32-40
Onions	32-36
Peas (green)	32-36
Potatoes	35-40
Potatoes (sweet)	50-55
Radishes	32-36
Squash	33-36
Tomatoes	35-40
	MEATS
	Bacon
	Beef (fresh)
	Eggs
	Fish (fresh)
	Lamb
	Mutton
	Oysters (shell)
	Pork (fresh)
	Poultry
	Veal
	DAIRY PRODUCTS
	Butter
	Cheese
	Ice Cream
	Milk (sweet)
	Milk (butter)
	FROZEN FOODS
	Eggs
	Fish
	Fruits in syrup
	Meats
	Vegetables

Courtesy Am. Soc. Refrigerating Engineers.

Desirable Wall Conditions

(Wall conductivities most generally desirable for handling various types of perishables).

Type of Truck	B.T.U. per hour per degree F. per square foot
Bakery, Candy and Bread Trucks	.16
Trucks for fresh and smoked meats	.12 to .19
Trucks for sausage and fresh cut meats	.10 to .56
Ice cream, quick-frozen food trucks	.06 to .56
Trucks for solid carbon-dioxide transport	.025

COMMERCIAL CAR JOURNAL
APRIL, 1939

UNIFORM

SIZE & WEIGHT RECOMMENDATIONS

1. Standards Adopted by the American Association of State Highway Officials.

2. Recommendations of Society of Automotive Engineers Committee.

1. AASHO Standards

It is the opinion of the Association of State Highway Officials that the adoption of a uniform standard to govern gross weight, dimensions and speeds for motor vehicles operating on the highways is a fundamental necessity for the following reasons:

"(a) To establish one of the fundamental prerequisites of highway design.

"(b) To promote efficiency in the interstate operation of the motor vehicle.

"(c) To secure safety in highway operation.

"(d) To remove from the highways undesirable equipment and operations.

"(e) To stabilize on a definite basis the many relationships between the highway and the motor vehicle.

"These conclusions have been reached after many years of consideration on the part of the Highway Transport Committee of the Association, supplemented by painstaking research by a number of the State Highway Departments and the Bureau of Public Roads.

"The association therefore makes the following recommendations to the proper State authorities having control of traffic on the highways:

(1) Width

"No vehicle shall exceed a total outside width, including any load thereon, of 8 feet, except vehicles now in operation which, by reason of the substitution of pneumatic tires for other types of tires, exceed the above limit.

(2) Height

"No vehicle unladen or with load shall exceed a height of 12 feet, 6 inches.

(3) Length

"(a) No vehicle shall exceed a length of 35 feet extreme overall dimensions, inclusive of front and rear bumpers.

"(b) Combination of vehicles shall consist of not more than two units, and, when so combined, shall not exceed a total length of 45 feet.

"(c) The truck tractor and semi-trailer shall be construed to be one vehicle for the purpose of determining lengths.

"(d) For occasional movements of materials or objects of dimensions which exceed the limits hereon provided, a special permit shall be required.

(4) Speed

"(a) Minimum speed. No motor vehicle shall be unnecessarily driven at such a slow speed as to impede or block the normal and reasonable movement of traffic, except when reduced speed is necessary for safe operation or when a vehicle or a combination of vehicles is necessarily, or in compliance with law, proceeding at reduced speed.

"(b) Maximum speed. No bus or truck shall be operated at a speed greater than 45 miles per hour. Passenger automobiles may be operated at such speeds as shall be consistent at all times with safety and the proper use of the roads.

"(c) Vehicles equipped with solid rubber or cushion tires shall be operated at a speed not in excess of 10 miles per hour.

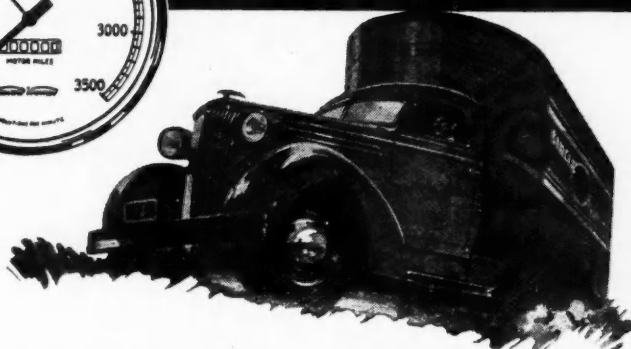
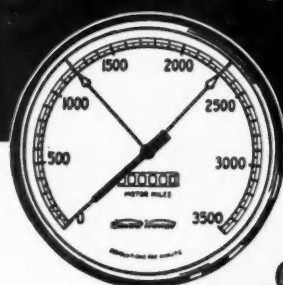
(5) Axle Load

"(a) The wheels of all vehicles, including trailers, except those operated at 10 miles per hour or less, shall be equipped with pneumatic tires.

"(b) No wheel equipped with high pressure, pneumatic, solid rubber or cushion tires shall carry a load in excess of 8000 pounds, or any axle load in excess of 16,000 pounds.

"Research indicates that low-pressure
[TURN TO NEXT PAGE PLEASE]

... KNOW HOW FAR YOUR MOTOR RUNS!
**CUT FUEL, OIL, REPAIR BILLS
AS MUCH AS 25%**
BY KNOWING INSTEAD OF GUESSING



Amazing New Motor Mile Tachometer Records Actual Miles Your Motor Runs!

WHEN a truck takes a long hill in low gear, the motor is piling up many more miles than the speedometer shows. When a driver leaves the motor idling during a stop, it's adding up "motor miles" which are never recorded. If you service that truck on a basis of speedometer miles, you're inviting premature wear and needless repair bills.

Now, for the first time, you can keep track of motor miles—know how far the motor runs—and service it accordingly. The amazing new Stewart-Warner Motor Mile Tachometer records motor mileage whenever the motor is turning, regardless of truck travel.

More than that, this utterly new kind

of tachometer shows your driver the ECONOMY RANGE of motor speed—the space on the dial where the tachometer needle should be for economical operation. This feature alone can cut your fuel and oil bills as much as 25% or more.

The two red pointers on the dial are permanently set at the points which mark the upper and lower limits of the ECONOMY RANGE for the particular truck on which the instrument is installed. It frees you from the terrific penalties exacted by overspeeding or "lugging."

Get all the details about this new method of truck operation, and learn how much it can save you in a year! Mail the coupon!

STEWART WARNER

MOTOR MILE TACHOMETER

STEWART-WARNER CORPORATION
1876 Diversey Parkway • Chicago, Ill.

STEWART-WARNER CORPORATION Dept. D
1876 Diversey Parkway, Chicago, Illinois

I am operating.....trucks. Please tell me how the Stewart-Warner Motor Mile Tachometer can cut my fuel, gas, and repair expense.

Name.....

Address.....

City.....State.....

Firm Name.....

UNIFORM SIZE & WEIGHT RECOMMENDATIONS

(Continued from page 87)

pneumatic tires can carry 9000 pounds per wheel without increasing pavement slab stresses.

"An axle load shall be defined as the total load on all wheels whose centers may be included between two parallel transverse vertical planes 40 inches apart.

"(c) These limitations are recommended for all main rural and inter-city roads, but should not be construed as inhibiting heavier axle loads in metropolitan areas if any State desires.

"(d) These weight specifications for

wheel and axle loads may be restricted by the State Highway Department for a reasonable period where road subgrades are materially weakened from thawing after deep frost, or from a continued saturated condition of the soil.

(6) Gross Weights

"Subject to the limitation imposed by the recommended axle loads, no vehicle shall be operated whose total gross weight, with load, exceeds that given by the formula $W = c (L \text{ plus } 40)$ where:

"W = total gross weight, with load, in pounds;

c = a coefficient to be determined by the individual states;

L = the distance between the first and last axles of a vehicle or combination of vehicles, in feet.

"A value of 700 is recommended for 'c' as the lowest which should be imposed, but this should not be construed as inhibiting greater values.

"NOTE: This gross weight recommendation is particularly applicable to bridges, since axle loads and length limitations are determinative in their practical application."

Approvals

The foregoing recommendations have been approved by:

The Bureau of Public Roads of the United States Department of Agriculture.
The American Automobile Association.
Automobile Manufacturers Association.
The National Association of Motor Bus Operators.

The National Grange.

American Farm Bureau Federation.

National Industrial Traffic League.

The Highway Group of the Joint Committee of Railroads and Highway Users.

The Advisory Committee of the National Highway Users Conference.

2. S.A.E. Recommendations

The following recommendations are based on practical engineering requirements for the design and operation of motor trucks and their combination of units.

(1) Width

The maximum body width shall be 96 in. The maximum width over dual pneumatic tires measured on a line through the center of the hub, parallel to the ground, shall be 102 in.

(2) Height

The maximum height shall be 12 ft. 6 in. when the vehicle is unladen.

(3) Lengths

(a) Classification of Vehicles—Classification of single units for separate operation or for operation in combinations.

(1) Motor Truck—A single self-propelled unit carrying its own load.

(2) Tractor-truck—A single self-propelled unit provided with a fifth wheel for a semi-trailer and with or without a body for carrying its own load.

(3) Semi-trailer—A unit drawn by a tractor-truck by means of a fifth wheel connection.

(4) Trailer—A unit drawn by a truck or tractor-truck and entirely sustaining its own load.

(b) Single Units—The maximum length for any single unit shall be 35 ft.

(c) Combinations of Units—

(1) The maximum length of a combination of vehicles on all classes of thoroughfare 20 ft. wide or less shall be 45 ft.

[TURN TO PAGE 90, PLEASE]



HERE'S a practical safety sign for you—a goodwill builder and a direct source of benefit. For this sign tells the whole world of traffic that your trucks and cars travel only at safe, reasonable speeds.

Every one of these signs on your fleet will build prestige for you as an institution. And more prestige always means more business.

You have a just right to be proud of the full equipment of your fleet, and the safeguards you use in your operations. So cash in! Call your Handy Distributor right away. He has your free "Safety Equipped" decals ready and waiting.

HANDY GOVERNOR, Detroit

Division of King-Seeley Corp.

World's Largest Builder of Automotive Governors

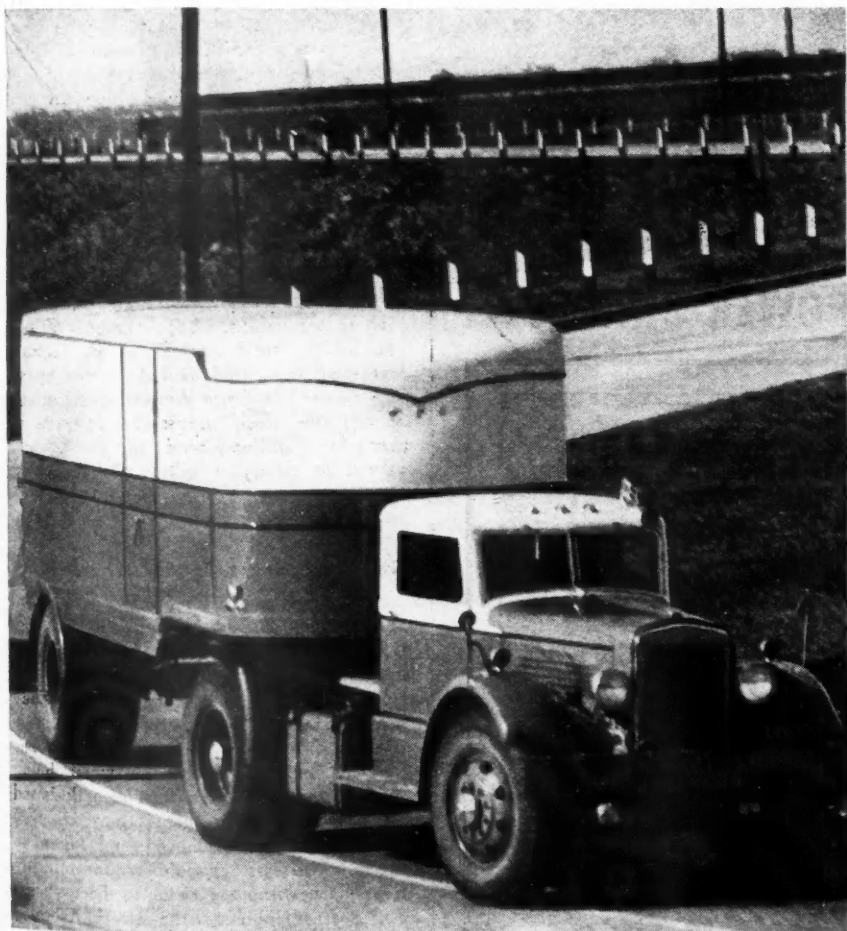
HANDY

*Visible
Action*

GOVERNORS ...

SHOW ME

Socony-Vacuum Fleet Engineer showed Missouri operator fine results: despite 40% increase in size of fleet, his oil costs stayed the same and engine maintenance costs went down!



SOCONY-VACUUM

*Fleet
Engineering
Service*

GIVES OPERATORS

1 SPECIAL STUDY OF YOUR FLEET

You get lubricants exactly right for your equipment and your operating conditions.

2 NATION-WIDE SERVICE

The products we recommend are available wherever you need them, from coast to coast.

3 EXPERIENCE

Knowledge gained from 73 years' experience applied to your particular problem.

4 LUBRICANTS TO FIT

We select the right grades for your equipment from the famous Sovac Bus and Truck Oils, Mobilubes, Mobilgreases.

**SOCONY-
VACUUM
OIL CO., INC.**

STANDARD OIL
OF NEW YORK DIVISION
WHITE STAR DIVISION
LUBRITE DIVISION
MAGNOLIA PETROLEUM COMPANY
CHICAGO DIVISION
WHITE EAGLE DIVISION
WADHAMS DIVISION
GENERAL PETROLEUM
CORPORATION OF CALIFORNIA

UNIFORM SIZE & WEIGHT RECOMMENDATIONS

(Continued from page 88)

- (2) The maximum length of all combinations of vehicles on all classes of thoroughfares more than 20 ft. wide shall be 65 ft.
- (d) Special Equipment—For single units over 35 ft. long and for multiple unit combinations of vehicles over 65 ft. long, special permits good for not over one year shall be required.
- (e) Number of Units—The minimum (or least) maximum number of units to be operated in any one combination of vehicles shall be two.

(4) Weights

(a) Definitions of Thoroughfares—

- (1) Streets—Thoroughfares within municipalities and immediately contiguous metropolitan districts.

	Streets (1)	Highways (2)	Roads (3)
High Pressure Pneumatics	22,500	18,000	16,000
Balloon Type Tires	22,500	20,000	18,000
Solid Tires (see note)	22,500	Not allowed	Not allowed

Note—Upon adoption of these weight regulations no new vehicles, equipped with solid tires, shall be registered and/or licensed for operation on Roads or Highways.

- (2) Highways—Main arterial routes between cities and towns and connecting industrial areas.
- (3) Roads—All others.

- (b) Weight Limitations—The minimum (or least) maximum axle weight limitations in pounds, in lieu of limitations in gross weight and inch width of tires, shall be

Safety COMES First

With a \$30,000 Payload like this



OWNER PROTECTS
UNIT AS WELL AS SEVEN
THOROUGHBREDS with
**MIDLAND
POWER BRAKES**

● Safe, dependable braking is of first importance in transporting high strung thoroughbred horses. Not only must there be ample power to stop quickly and surely—but this power must be *easily controlled* for gentle, cushioned stops.

Midland Power Brakes have met these requirements so well on the unit shown above that they are now being installed on similar units by the owner.

You may never carry a payload of thoroughbreds, but your present cargoes deserve the same dependable protection offered by Midland Power Brakes. Complete kits are available for Ford, Chevrolet, Dodge, International, and G.M.C. See your nearest Midland distributor for complete facts, or write us direct.

THE MIDLAND STEEL PRODUCTS CO.
10605 Madison Avenue • Cleveland, Ohio
Export Dept., 38 Pearl St., New York City



Midland's factory rebuilt exchange plan
guarantees satisfactory service . . .

MIDLAND
POWER BRAKE
EQUIPMENT

MIDLAND

(CHRISTENSEN)

Power Brakes

Fleets Buy More Chevrolet Cars

More than half of the 1938 passenger cars purchased by the 440 leading fleet operators in the nation were Chevrolets, according to official fleet registration figures released recently. Of a total of 26,025 passenger cars put into fleet service last year, the figures show, Chevrolet registered 13,089.

In the truck fleet sales division, Chevrolet registered 7,687 units. The next most popular make registered 6,370 units.

AC Fuel Pump Chart Available

In order to meet the growing demand for complete service information on the AC Rebuilt Fuel Pump Exchange plan, an expanded application and conversion chart is now available for fleet use. Almost universal acceptance of the plan has taken place during its little more than a year of existence according to Sumner S. Howard, AC service manager. For a copy of the chart address AC Spark Plug Division of General Motors, Flint, Mich.

Trucks Transport Half Live Stock

Practically one-half of the cattle, hogs and sheep arriving at markets in this country during 1938 were transported from farms to market by motor trucks, a new high in percentage. Approximately 60 per cent of the total tonnage of all animals marketed was truck-hauled, according to *The Corn Belt Farm Dailies*, publications of the live stock industry. Upwards of thirty-five million head of live stock, valued at nearly a billion dollars, were trucked to market last year.

Grey-Rock Brake Service Chart

A new 40-page three-color Grey-Rock brake service chart with individual instructions by car makes and models for adjusting, reconditioning, trouble-shooting and relining all brakes has been released. Each brake assembly is illustrated in perspective, in order that the mechanic may see the mechanism as it looks when being worked on. The chart has been designed for practical use in that it may be used on a pedestal or removed and taken to the job. Grey-Rock jobbers are offering this chart without charge to fleet shops. For nearest jobber, write U. S. Asbestos Division, Manheim, Pa.

-REDUCING DIET



REPUBLIC STEEL CORPORATION

General Offices: CLEVELAND, OHIO • Alloy Steel Division: MASSILLON, OHIO
 BERGER MANUFACTURING DIVISION • NILES STEEL PRODUCTS DIVISION • UNION DRAWN STEEL DIVISION
 STEEL AND TUBES, INC. • TRUSCON STEEL COMPANY

C.C.Q. QUIZ

There are three contributors to the Quiz this month. R. F. Bahl, who is an old

hand at formulating Quiz questions by now, poses the first two questions. A. T. Schleder, of McKees Rocks, Pa., tries to stump you with the next three, and the rest are hurled at you through the courtesy of the National Users' Conference.

We pay you good money for trying to stump fellow-readers. For every question accepted we hand over \$1. Come on, let us have your questions.

In scoring, give yourself 10 points for each correct answer. Add up your points and, as usual, 70 is fair, 80 is good, 90 is very good and 100 puts you on our Honor Roll.

Correct Answers on page 108

NOTHING TO THROW AWAY

But the
Used
Filtering
Material

Container
Is Not
Discarded



REDUCE YOUR COSTS — AND
KEEP YOUR OIL CLEAN LONGER

With the MICHIANA re-packable filtering element—there is no need for complete replacement—you can save this expense—because only the dirty filtering material is discarded.

Now Adapted to Other Makes of Replaceable Element Filters

In answer to requests of bus, truck and fleet owners, MICHIANA has now made its Re-Packable Element adaptable to filters of other makes—giving them the low cost re-packing feature heretofore available only with MICHIANA Filters.

Ask for descriptive literature.

MICHIANA PRODUCTS CORPORATION, Michigan City, Indiana

Ask for Booklet
337-CC

MICHIANA
Duo-Flo
DEPTH TYPE FILTERS



When writing to advertisers please mention Commercial Car Journal

1. If you had helical gears on your truck, it would mean that they were
Encased in a bath of oil
Noisy as all hell
In the form of a spiral
Made of an especially hard steel

2. Supposing the gas tank of your truck had a volume of 5000 cubic inches, what would happen if, having just run out of gas, you drove up to a service station and told the attendant to put in 10 gallons?

It would just fill the tank
It would overflow
It wouldn't come near filling the tank

3. Which of these men is credited with organizing General Motors Corp.?

Alfred P. Sloan *William Knudsen*
Charles E. Duryea *William C. Durant*

4. If you were at the eastern terminus of the Lincoln Highway, you would be at
Old North Church, Boston
Brooklyn Bridge, Brooklyn
Times Square, New York
Lincoln Memorial, Washington, D. C.

5. If you were an Englishman and your gas tank ran dry you would hail a station attendant and courteously demand

Gasoline (with a broad "a")
Petrol tonic motor fuel

6. Communities in the United States that are completely dependent on highway transportation (not being served by railroads) number

528	1263	2515	15,840
48,492	51,993	86,741	

7. The ideal position of the hands on a steering wheel while driving, assuming the steering wheel to be the face of a clock, is

10:20	9:15	4:40
5:15	6:00	12:00

8. Which of the following forms of transportation pays the biggest tax bill in the United States:

railway *highway* *airway*
waterway *pipeline*

9. To users of motor vehicles the term "diversion" should mean

The rerouting of trucks to most favourable markets
Use of highway revenues for non-highway purposes
Attendance at trade conventions

10. The first oil well in the United States was drilled near

Oil City, Pa. *Tyler, Tex.* *Reno, Nev.*
Titusville, Pa. *Sutters Mill, Cal.*



McCullough Transfer's new Fruehauf trailer complete with 16 cu. yd. (water level) body weighs only 7450 lb. Available as a standard model, the unit has a Yaloy frame 10 in. deep, progressive type springs and removable top section which forms an 8 cu. yd. body for handling heavy material loads

COMMERCIAL CAR JOURNAL
APRIL, 1939

OVER A MILLION *SAFE* MILES A YEAR



that's the *Raybestos* Record on the BAB-O Fleet

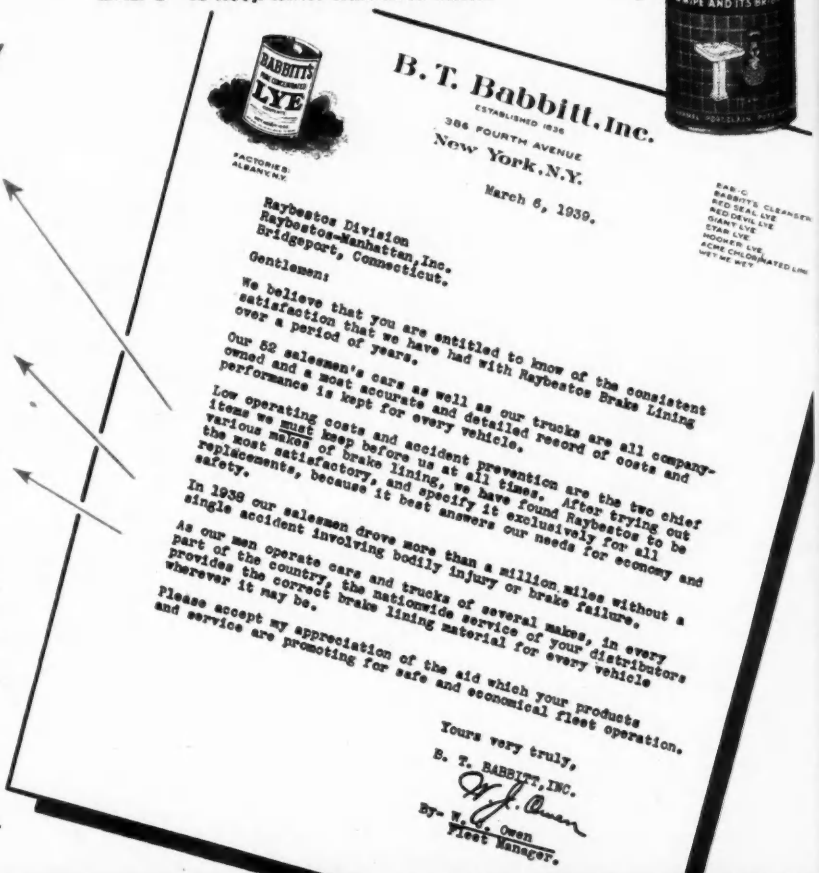
Fleet Manager Owen tells in his own words why he specifies Raybestos *EXCLUSIVELY*

- ☛ After trying out various makes of Brake Lining, we have found Raybestos to be the most satisfactory and specify it **EXCLUSIVELY**. * *
- ☛ Our salesmen drove over a million miles without a single accident involving bodily injury or brake failure. * *
- ☛ The nationwide service of your distributors provides the correct brake lining material for every vehicle. ●●

When one product is so outstandingly superior that it is used *exclusively* by leading fleet operators, it is worth investigating how it can improve *your* safety record and reduce *your* costs.

**THE RAYBESTOS DIVISION
OF RAYBESTOS-MANHATTAN, INC., BRIDGEPORT, CONN.**

These 2 members of the Babbitt family are specially well known to the automotive trade. "*WET-ME-WET*" for polishing windshields and chromium, and "*BAB-O*" to keep white-wall tires white.



Raybestos

HEAVY DUTY PRODUCTS

BRAKE LINING · CLUTCH FACINGS · FAN BELTS · HOSE

TROUBLE SHOOTING GUIDE

(Continued from Page 100)

HARD STARTING

A—IGNITION

- A1. Low battery
- A2. Improperly spaced or dirty spark plugs
- A3. Improperly spaced or dirty contact points
- A4. Weak coil
- A5. Weak condenser
- A6. Defective starting motor
- A7. Too heavy oil
- A8. Poor insulation on high tension wires

B—FUEL SYSTEM

- B1. Vapor lock
- B2. Improper carburetor adjustment
- B3. Improper automatic choke adjustment
- B4. Defective fuel pump

Frame Extensions for Fords

W. G. Reeves, Stockbridge, Mich., is supplying cut frame and slip-on frame extensions for Ford trucks. Cut frame types come in lengths from 18 in. to 108 in.

while the slip-on type are standard in seven lengths from 18 in. to 72 in. and special lengths are available. The extensions double the strength of the standard frame for two thirds of its length and are supplied with cross members where bracing is necessary.

Combination Utilities Truck

The Truck Engineering Corp., Cleveland, Ohio has managed to get a power-operated winch and crane and a hydraulic repair tower all on one chassis. The chassis is a D35 International-Harvester. The tower is a Gar Wood Industries three section hydraulic repair tower elevating to a platform height of 24 ft. Telescoping ladders

BIG SAVINGS WITH THE FUELOMETER

**COMPACT
ACCURATE
FOOLPROOF**



**EASY TO
INSTALL
AND READ**

■ Just as the name implies, the Fuelometer is a precision instrument that accurately records the fuel consumption of motors. Sealed to prevent tampering, it assures positive protection against dishonesty and inefficiency.

The Fuelometer carries loads up to 22 gallons per hour by actual test. Operating by pressure from the fuel pump, recordings are only made when the pump is in operation. Losses of fuel from theft or otherwise are thus prevented.

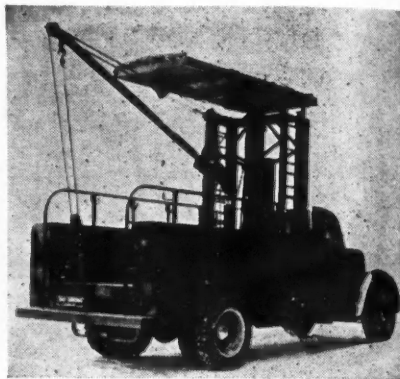
The Fuelometer is easily installed. It may be mounted either horizontally or vertically in any position or place convenient for easy reading. Two leads, one from the fuel pump, and the other from the carburetor complete the installation.

Made of non-corrosive bronze and brass metals, the Fuelometer is only 3 1/4 in. in diameter by 4 5/8 in. high.

Full information on request; no obligation.

DAYTON FUELOMETER CORP.

DAYTON, OHIO



Combination unit by Truck Engineering Corp.

are part of the equipment. The crane is a Mead-Morrison removable mast type with adjustable boom. The crane has a capacity of 3000 lb. and when the winch is used by itself it has a maximum line pull on a bare drum of 15,000 lb.

Sterling Cable in Sets

Sterling Steelductor, the new stainless-steel high-tension cable, is now available in boxed sets for popular cars. Wires are cut to correct lengths and wherever possible, distributor clips are soldered in place and cylinder numbers clearly marked on the wires.

Chief feature of a special set for Fords is a loom or auxiliary conduit to take the generator and primary lead wires that normally run through the regular spark plug wire conduit. The extra loom is clamped underneath the conduit, and together with clamps, new gaskets and new rubber sleeves, are furnished with each set complete with instructions. For full details, address Sterling Cable division of the Electric Auto-Lite Co., Port Huron, Mich.

ICC Cites Carrier Violations

The Interstate Commerce Commission reports several violations with regard to the preservation of records and memoranda by all common carriers and failure by Class I carriers to adopt the uniform system of accounts. Under the terms of regulations issued Aug. 3, 1936, and Nov. 29, 1937, records must be readily accessible at the carrier's place of business and the Uniform system of accounts must be used by Class I carriers.

FREE BOOKS

BOOKLETS — PAMPHLETS — CATALOGS

... a special selection made by the editors ... to get your copy, just check the letter on the post card between pages 162 and 163 which corresponds with the item you desire ... and mail to Commercial Car Journal, Philadelphia, Pa.

A—Dodge and Diesel

A new diesel engine presentation just released by Dodge entitled "Dodge and Diesel" contains some really illuminating facts on the relative merits of the diesel. Within its 24 pages is a brief analysis of how it works, how it differs from the gasoline engine in performance and economy and how various types of diesels compare. Better check "A" on the post card now for your copy.

B—Tachometer Merits

A booklet pointing out advantages in operation and economy through the use of a tachometer has been released by the Stewart Warner Corp. Fleetmen should find its deductions interesting as well as the descriptive pages relating to the company's new Motor Mile Recording Tachometer. Just check "B" on the post card for a copy.

C—Midland Brake Literature

Illustrated circulars giving complete details of Midland-Christensen power brake kits are hot off the press. Vacuum and full air kits, including every nut and bolt needed, are available for Ford, Chevrolet and International trucks, and there are additional vacuum kits for Dodge and GMC. Any one interested in power braking equipment will do well to get a copy. Just check "C" on the post card and indicate the make of truck involved.

D—Lee Tire Series

"Tire Mileages: Are Your Comparisons True or False" is one of a series of informative articles by A. H. Nellen of the Lee Tire & Rubber Co. Each in the series discusses a vital problem of interest to every fleetman. Others include "Weighing Truck Tire Quality," "Growth of Pneumatic Tires: Comparing Rayon Cord with Cotton Cord," etc. A check next to "D" on the post card brings you the series of six.

E—Oakite Steam Gun Booklet

Complete specifications and data covering solution-lifting steam guns designed for use in shops with 30 or more pounds available steam pressure have been compiled in convenient booklet form by Oakite Products, Inc., New York. Fleetmen may secure a copy of this 8-page booklet by checking "E" on the post card.

F—Tung-Sol Issues New Chart

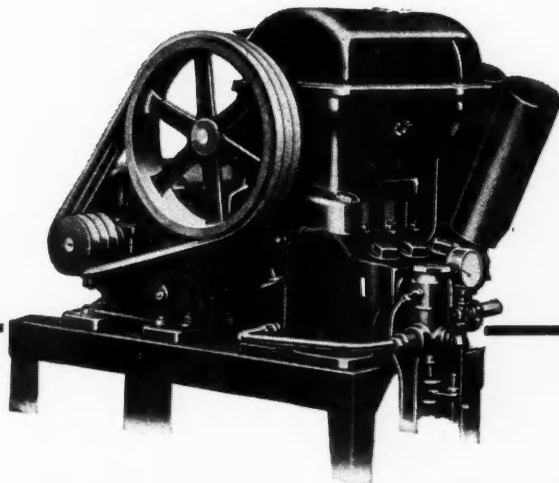
A new and complete lamp chart (Form

A 4) covering details of correct bulb specifications on all passenger cars and trucks.

G—Flour City Brush Catalog

Virtually everything in brushes from a glue-pot type to the big hose-connected "Buswash" can be found in Flour City Brush Co.'s new 80-page catalog. Better check "G" on the post card for a copy and keep it handy.

MORE FREE BOOKS ON NEXT PAGE



Faster Washing with CURTIS Silent Hydraulic Washer

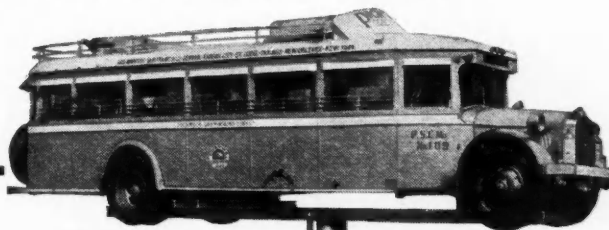
You can speed up your wash jobs with a Curtis hydraulic washer because it delivers an even, powerful, fast-cleaning stream — uses hot or cold water solutions. Efficient design and husky construction permits steady, day in and day out service with less maintenance.

The Curtis washer has a slow-speed, fully enclosed, three cylinder pump, with an automatic pressure governor. Silent V-belt drive; self-oiling; outside packed pistons; and a heavy four-bearing crankshaft. 4 sizes—one and two nozzle types.

CURTIS TRUCK AND BUS LIFTS

Curtis hydraulic oil-locked lifts are made in six and ten ton capacities for trucks and busses. Also two-post types. Generous structural safety

factor. Absolutely safe at any height. Controlled lowering speed. Wheels hang free for brake and wheel adjustments.



Write for description and prices

CURTIS PNEUMATIC MACHINERY CO.

1970 Kienlen Avenue, St. Louis, Mo.

NEW YORK

CHICAGO

SAN FRANCISCO

COMMERCIAL CAR JOURNAL
APRIL, 1939

When writing to advertisers please mention Commercial Car Journal

FREE BOOKS

(CONTINUED FROM PAGE 107)

H—Niehoff Electrical Parts Data

"Contact", a handy pocket-sized booklet just released by C. E. Niehoff & Co., Chicago, contains some interesting facts on the construction and function of coils, condensers, distributor parts, voltage regulators and brushes. Simplified drawings add much to the presentation. Check "H" on the post card for a copy.

I—"Lest We Regret"

In addition to a complete statistical

analysis of accident experience arranged in practically every possible category, a new booklet from the Travelers Insurance Co. presents an interesting concept of driving danger in terms of "Danger Units" based on the fact that energy of a moving vehicle builds up in proportion to the square of its speed. A well-worth while and informative booklet. Check "I" on the post card for a copy.

J—Johnson Bronze Catalog

Johnson Bronze catalog 390 gives complete details of the company's line of bronze bearings. Within the 72 pages are listed 800 stock sizes of general-purpose bearings,

350 sizes of bronze cored and solid bars and 230 sizes of electric motor service bearings, all fully illustrated. Check "J" on the post card for your copy.

K—U. S. Condensed Tool Catalog

United States Electrical Tool Co. has issued a 1939 edition of its condensed catalog for handy reference. This embodies the company's complete line of electrical tools, portable, bench and floor. Check "K" on the post card for full details.

L—Cold Plate Catalog

A new refrigerating catalog showing the advantages of cold plates in refrigerated trucks and other applications, has been completed by the Dole Refrigerating Co., Chicago. Spiral bound and fully illustrated. Check "L" on the post card for a copy.

M—Compensating Fifth Wheel

Shorter overall length greater loading space and better load distribution are the revolutionary (no other word seems adequate) claims for a new compensating fifth wheel just introduced by the Austin Trailer Equipment Co. A circular describing the device is now available. You'll want it. Just check "M" on the post card.

"LOW LOADING HEIGHT"

"OK" 618 FOR BODIES 8' TO 7' CAP. 5 TO 6 TON LOW MOUNTING 11"

"OK" 718 FOR BODIES 10' TO 8' CAP. 5 TO 7 TON LOW MOUNTING 11"

"OK" 722 FOR BODIES 11' TO 8' CAP. 6 TO 8 TON LOW MOUNTING 12"

"OK" 726 FOR BODIES 12' TO 9' CAP. 10 TO 12 TON LOW MOUNTING 13 1/2"

"OK" 826 FOR BODIES 12' TO 9' CAP. 13 TO 15 TON LOW MOUNTING 13 1/2"

"OK" 7726 FOR BODIES 15' TO 9' CAP. 15 TO 22 TON LOW MOUNTING 14 1/2"

"OK" 8826 FOR BODIES 15' TO 9' CAP. 22 TO 30 TON LOW MOUNTING 14 1/2"

NOTE: HOIST NUMBERS INDICATE CYLINDER SIZE AND STROKE
NOTE: THE SHORTER THE BODY—THE GREATER THE HOIST CAPACITY

5 to 30 ton

ANTHONY HYDRAULIC LINE OF "OK" HOISTS FOR ANY MAKE, MODEL OR W.B. CHASSIS

You can have "Low Loading Height" without extra cost!

All Anthony "OK" Hydraulic Hoists and Bodies, from the smallest to the largest, incorporate Low Loading Height as standard construction. No price penalty.

Priced as low as the lowest, we honestly believe Anthony "OK" Hydraulic Hoists and Bodies give you more hoist value for the dollar.

Let us figure with you on your next Hydraulic Hoist and Body, no obligation whatsoever.

A model, size and capacity
ANTHONY ALL STEEL BODY
to meet every hauling
requirement.



QUIZ ANSWERS

(See page 94)

1. In the form of a spiral.
2. It wouldn't come near filling the tank. (231 cu. in. in 1 gal.)
3. William C. Durant, in 1908.
4. Times Square, New York City.
5. Petrol, from the King down.
6. 48,492.
7. 10:20. (This position has been found to be the most comfortable and affords the greatest degree of control over the vehicle.)
8. Highway. (Over a billion dollars more than the second-place railroads.)
9. Use of highway revenues for non-highway purposes. (Since 1924 diverted revenues have amounted to 1 billion 230 millions of dollars.)
10. Titusville, Pa. (On a farm, by Edwin L. Drake. It first produced oil in 1859.)

IHC Net Income Down

Net income of the International Harvester Co. for the fiscal year ended Oct. 31, 1938, was \$18,472,000 compared with a net income in 1937 of \$32,493,000. The 1938 income was equivalent to \$3.00 per share of common stock after provision for preferred dividends as compared with \$6.31 in 1937.

Motor truck sales in 1938 totaled \$60,209,000 as against \$76,100,000 in 1937. Truck sales in 1938 lead tractor sales by \$9000.

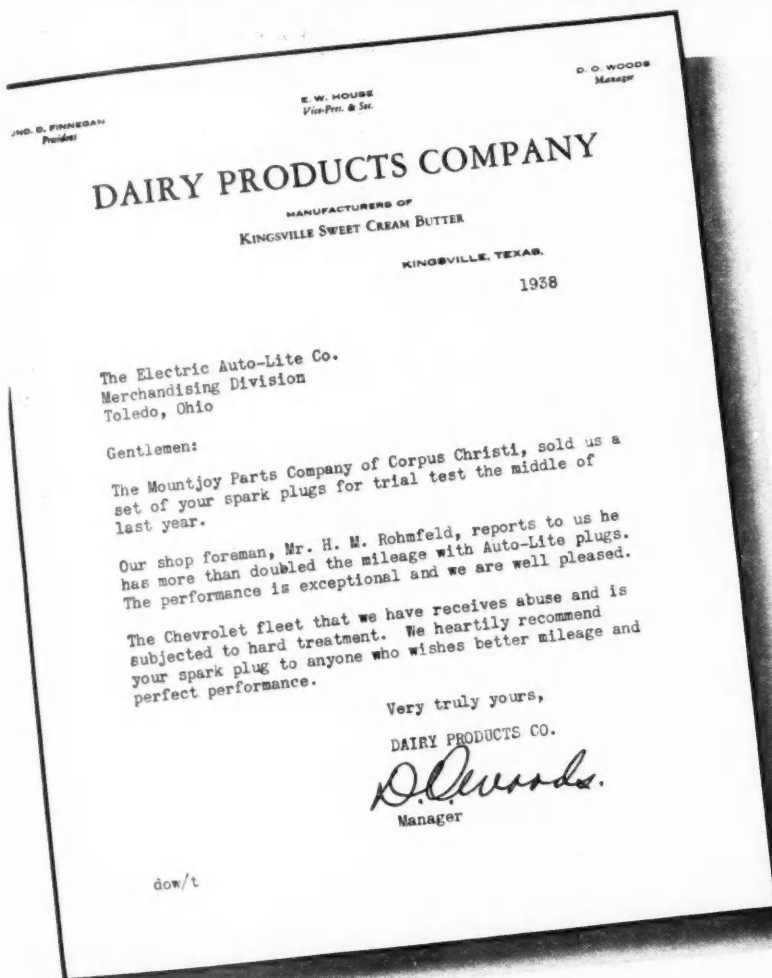
Additional Private Carrier Hearing

The Interstate Commerce Commission has scheduled an additional hearing with regard to bringing private carriers under the provisions of the Motor Carrier Act at the offices of the Commission, Washington, D. C., on April 11 at 10 a.m.

COMMERCIAL CAR JOURNAL
APRIL, 1939

**SHOP FOREMAN
SAYS:**

"Double The Mileage WITH AUTO-LITE PLUGS!"



ALL over America the news of a new kind of spark plug is traveling fast. A spark plug that puts new life in sluggish, "spark-weary" engines—lasts longer, too.

"Our shop foreman reports he has more than doubled the mileage with Auto-Lite plugs," writes the operator of a dairy fleet.

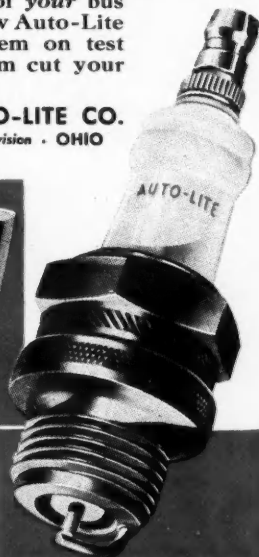
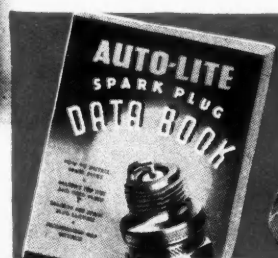
"We find that Auto-Lite Spark Plugs have given us service superior to any plug previously used in our equipment," reports the president of a large trucking company. And from other truck and bus operators throughout the country who have these new plugs on test come equally enthusiastic letters.

There's a reason, and a good one, for the increased mileage and improved performance that result when new Auto-Lite spark plugs go on the job.

Auto-Lite ignition engineers perfected a new electrode alloy, called Konium, which—together with Auto-Lite's "geometric" gap design—makes it possible to produce a more effective spark with less effort. Eases the electrical stress on all units of the ignition system—prolongs their life. And Ziramic—the new insulator material developed by those same engineers—resists heat, electrical and mechanical shock as no other insulator ever has.

Cut operating costs and at the same time step up the performance of your bus or truck fleet with new Auto-Lite Spark Plugs. Put them on test today and watch them cut your spark plug expense.

THE ELECTRIC AUTO-LITE CO.
TOLEDO - Merchandising Division - OHIO



Write for your free copy
of this valuable data book

AUTO-LITE SPARK PLUGS

IGNITION
ENGINEERED BY
IGNITION ENGINEERS

RECENT TRUCK LEGISLATION

Important new laws pertaining to the operation of motor vehicles have been up for consideration in Congress and State Legislatures. A summation of important proceedings, including bills actually passed and others currently under discussion is given below. For convenience they are grouped according to States.

FEDERAL

The Truman bill, which would prohibit the operation of commercial and passenger vehicles in interstate commerce by un-

licensed drivers, was passed by the Senate recently after its sponsor, Senator Harry S. Truman, Democrat of Missouri, estimated that 33 per cent of deaths resulting from automobile accidents in this country could be prevented by making effective strict drivers' license requirements.

In order for states to qualify under the proposed federal standards, they would have to require drivers to submit to eye sight tests, demonstrate ability to read highway and traffic signs; renew license within a three-year period; be at least 16

years of age; and display the license upon demand.

The Association of American Railroads, represented by R. V. Fletcher, presented on Feb. 24 the railroad's plan for an all-powerful Transportation Board before the House Committee on Interstate and Foreign Commerce. The Transportation Board would have jurisdiction over all forms of transportation and would take over the functions and duties now vested in the U. S. Bureau of Public Roads and the I.C.C. except for the establishment of rates.

Known as the proposed "Transportation Act of 1939," the plan was formally introduced by Chairman Lea as H.R. 4862 on March 8. It is understood this move does not represent sponsorship by Lea but only a desire to make copies available in printed form.

A bill "to terminate the power of the Interstate Commerce Commission to determine the need for Federal regulation of the size and weight of motor vehicles" was introduced in the House, Feb. 27 by Representative O'Neal.

Senator Wiley introduced a resolution (S. Res. 101 March 13,) to create a committee of three Senators to make a study of legislation and other governmental action which has resulted in barriers to interstate commerce and the effect of such action on the economic life of the nation. A similar resolution (H. Res. 122) was introduced in the House by Representative Cannon asking for a committee of five to consider a report by the Bureau of Agricultural Economics entitled, "Barriers to Internal Trade in Farm Products". (Copies of this 104-page report may be obtained from the Superintendent of Documents U. S. Government Printing Office, Washington, D.C. at 25 cents each. Twenty pages are devoted to a description of state laws including ports of entry together with an outline of the purpose of these laws and suggested state or Federal legislation to correct the situation.)

STATE

ARKANSAS—A bill fixing the maximum speed limit at 60 m.p.h. was signed by the Governor on March 9 as was a bill which changes the time of purchasing automobile licenses from Nov. 1 to Dec. 31. A bill clarifying the maximum weight limits passed the legislature after it had been modified to meet most objections.

IDAHO—Legislature passed a new reciprocity law and a reciprocal truck license agreement has been announced between Idaho and Washington.

NEVADA—Legislature adjourned March 18 after passing bills which will increase the diesel fuel tax one cent per gallon, increase truck fees collected by the Public Service Commission and repeal reciprocity. One bill reducing fees for trucks licensed after the middle of the year granting limited reciprocity on Public Service Commission plates, is before the Governor.

NEW MEXICO—A new law repealing the

(TURN TO PAGE 114 PLEASE)

Sterling MOTOR TRUCKS HAVE ESTABLISHED NEW LOW OPERATING COSTS FOR MANY




Performance, Economy, Dependability, and Sturdiness constitute the foundation upon which Sterling has built its reputation as a superior motor truck.

Sterling motor trucks are operated by many leading haulers who demand unfaltering service and low operating costs.


Because Sterlings are built to meet your operating conditions, you are assured long, dependable service and greater profits.

"The Cost Sheets Tell The Story"

STERLING MOTORS CORPORATION
Milwaukee, Wis.



"I'm buying this set of American Brakeblok lining because I've never found another lining that wore as long... and left the drums in such good shape!"



American Brakeblok
TRADE MARK REG. U. S. PAT. OFF.
BRAKE LINING

● Until they tried American Brakeblok Brake Lining, many fleet operators and maintenance men took it for granted that they were getting the best mileage possible out of the lining they were using.

Once they tried American Brakeblok, however, they began to hang up *new* mileage records.

Savings naturally followed because replacements were fewer—and adjustments less frequent. In most cases, fleet safety improved, too.

Maybe you're satisfied with your present lining mileage, upkeep costs and safety record. But maybe you haven't tried American Brakeblok. Try it on just one unit and see for yourself.

AMERICAN BRAKEBLOK DIVISION OF THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY, 4600 MERRITT AVENUE, DETROIT, MICHIGAN

New Truck Registrations by Makes by Months

	Auto-car	Brock-way	Chevrolet	Diamond T	Dodge	Federal	Ford	G.M.C.	Hudson	Inter-nat'l	Mack	Plymouth	Reo	Sterling	Stewart	Studebaker	White Indiana	Willlys	Misc.	Total
January 1939	143	127	13,615	378	4,002	85	10,188	2,384	47	4,709	482	507	168	25	47	169	348	88	203	37,713
January 1938	130	64	10,338	357	3,145	118	9,304	1,777	103	4,581	257	691	217	16	27	161	301	179	229	31,998
% Change 1 Month.	+10	+88	+32	+6	+27	-28	+10	+34	-54	+3	+88	-27	-23	+56	+74	+5	+16	-51	-11	+10

LEGISLATION

(CONTINUED FROM PAGE 110)

Port of Entry Law sets up a field division of the state police authorized to carry out

certain provisions of the old law. "Registration" stations are contemplated in place of the old ports of entry. Trucks carrying specified agricultural and live stock products are exempt from mileage taxes and inspection fees.

NORTH DAKOTA—Both houses have passed a bill providing a one cent increase in the gas tax. It is reported that there will be a special session near the end of the year at which time highway legislation is expected to play an important part.

OHIO—A bill is now before the House which would prohibit trucks on certain highways from 1 p.m. to midnight Saturdays and from 9 a.m. to 11 p.m. Sundays.

RHODE ISLAND—Registrar Beane has ruled that Massachusetts truckmen who have no Rhode Island terminal and who have no equipment in that state may operate interstate with registration. The opposite holds for Rhode Island truckmen in Massachusetts.

SOUTH DAKOTA—Motor carrier compensation fees, based on gross weight have been reduced on trucks weighing eight tons or less. New fees range from \$20 to \$250 instead of from \$40 to \$250. Classification of trucks, trailers and semi trailers were also revised.

Load limit of oil trucks is now 1500 gal, but the Utilities Commission is authorized to grant permits for greater gallonage upon proof that safety provisions have been met.

TENNESSEE—Governor Prentice has signed a bill increasing the weight limit on trucks from 16,000 to 24,000 lb. The bill was drafted in return for an increase in truck taxes which now range to a maximum of \$225 per unit.

WEST VIRGINIA—The West Virginia legislature adjourned after passing one of five railroad-sponsored bills against the trucking industry. Senate Bill 130 was so worded as probably to prohibit all motor vehicle transportation of automobiles. Specifically it prohibits vehicles having two levels for the carriage of other vehicles, or carrying any part of another vehicle above the cab, and provides a maximum height of 115 in. (was 150 in.). Through the efforts of the West Virginia Motor Truck Association effective date was postponed until July 1, 1940.

Jahn 40,000-Lb. Trailer

The C. R. Jahn Co., Chicago announces a new heavy duty trailer with 40,000 lb. capacity on six wheels. It is convertible to a semi-trailer without any mechanical change by simply removing the front dolly. A standard size king pin fits any semi-automatic fifth wheel. Other features include wide-flange main beams, numerous cross members and gusset plates, spring-mounted front dolly, and self-equalized internal expanding brakes.



Heil Twin Cylinder Hydraulic Coal Dumper

Heil gives us operators everything we need . . . in

Bodies and Hoists for profitable heavy duty service

Whatever your specifications call for in bodies and hydraulic hoists, Heil facilities are geared to meet them with a **complete** line correctly engineered to give you profitable, trouble-free operation. The complete Heil line includes: standard hydraulic dumpers for 1½ and 2 ton trucks . . . twin-cylinder hydraulic dump units . . . hydraulic telescopic hoists, for six-wheelers, trailers, or semi-trailers . . . or straddle-mount telescopic hoists, for large capacity trucks, rock bodies, etc. Get Heil recommendations on your next equipment order. Write, wire, or phone today for information on this famous, profit-building line. Or, see your nearest Heil representative.



THE HEIL CO.

Milwaukee, Wisconsin

HOISTS • BODIES

• BOTTLE WASHERS •

TANKS •

DEHYDRATORS •

ROAD SCRAPERS •

OIL BURNERS •

Hillside, New Jersey

SNOW FLOWS •

WATER SYSTEMS

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COMMERCIAL CAR JOURNAL
APRIL, 1939

MAKE YOUR FLEET **SELL**



...as well as
DELIVER!



All donned in their coats of handsome S-W Kem Transport Enamel, Kimbel's new Fruehauf trailers do two jobs. They deliver and sell too! They have what it takes to make the right impression—top notch appearance in design and in finish. Says Kimbel, "Experience proves that our decision to use Kem Transport Enamel has been a wise one.

"Here are 4 reasons why:

1. S-W Kem is formulated to the highest standards for fleet maintenance. It assures us long run economy and a handsome appearance.
2. The S-W Technical Painting Service has

cooperated in setting up an efficient finishing program.

3. The S-W Transportation Color Service assists us in working out effective color combinations that identify our fleet, and increase visibility and safety.

4. We know that back of Sherwin-Williams products are research, manufacturing and distributing facilities unparalleled in the industry."

Let Sherwin-Williams be your source of help on all painting and color needs. No obligation. The Sherwin-Williams Company, Cleveland, Ohio and all principal cities.

SHERWIN-WILLIAMS KEM TRANSPORT ENAMELS

COMMERCIAL CAR JOURNAL
APRIL, 1939

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*You Can't
Expect Action
out of Weak Sisters*

**USE A PLUG
DESIGNED FOR
HEAVY DUTY ON
HEAVY DUTY JOBS**

Edison Spark Plugs for heavy duty service are specifically engineered for the ignition job expected of them. They are not just an off-shoot from passenger car plugs . . . and the proof is in every mile of service they turn in.

Edisons offer increased mileage and efficiency that will amaze any "first" user. They embody features that are not found in any other plug. There is a specific type for every commercial vehicle from the lighter jobs, right on through to semi-diesels.

For greater economy, try just one set in any of your units . . . and let the savings per mile prove to you that Edisons are tops.

EDISON-SPLITDORF CORP.
West Orange, N. J.

Edison SPARK PLUGS

ONE OF THE
Thomas A. Edison
INDUSTRIES



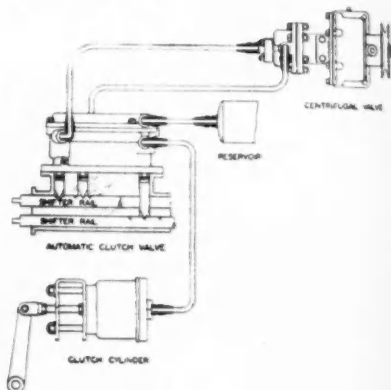
**Only Edison Spark Plugs
include**

**HI-VOLTAGE ALBANITE INSULATOR
SEALED-IN ELECTRODE CAP
BUILT-IN, LEAK-PROOF GASKET
CONDENSER ACTION FLAT GAP**

Automatic Clutch Control

A new Westinghouse Automatic Air Clutch Control provides automatic control for each phase of clutch operation. It engages the clutch as the engine accelerates and effects its disengagement when deceleration takes place.

The control consists of an air cylinder connected directly to the clutch throwout lever. The function of this air cylinder



is to disengage the clutch when supplied with sufficient air pressure. This pressure is provided from the normal braking system through an air valve, which, in turn, is controlled by a centrifugal governor, driven by the engine. This valve, described as a centrifugal valve, emits sufficient pressure to the air cylinder to hold the clutch released, at idling speed, and decreases this pressure in direct proportion to increased engine speed. Thus, first and reverse gears are pre-selective.



Small two-color transfers suitable for installation on the rear of any truck are being distributed to Handy customers. Available free from Handy Governor Division, King Seely Corp., 3925 W. Fort St., Detroit.

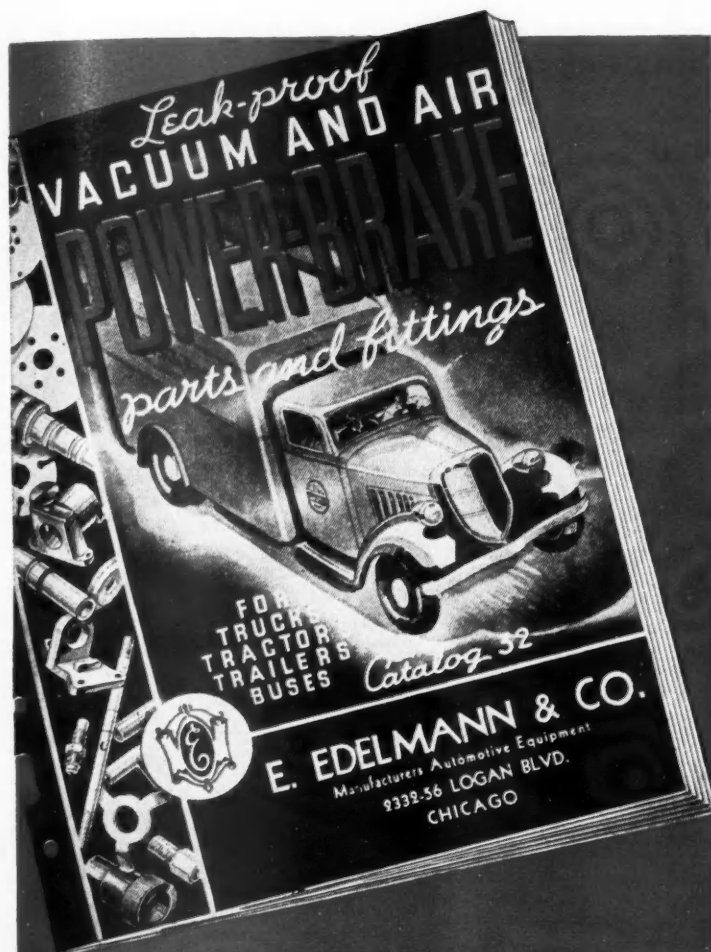
COMMERCIAL CAR JOURNAL
APRIL, 1939

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FLEET OPERATORS

Write Today for Your

FREE copy of this
New Complete Brake
Parts Manual!



*Up-to-the-minute
Listings on Power
Brake Parts.*

**PRACTICAL MONEY SAVING
INFORMATION YOU SHOULD HAVE**

EDELMANN

Whether you operate a fleet or only 5 trucks or a fleet of 500, this new Vacuum and Air Power Brake Manual will be your most valued possession when you want helpful information. For this practical handbook tells you all you want to know about braking; about the different parts; where and how they fit; and most important how to order only the correct size for your replacement.

Not only does this concise booklet contain the full simple explanation of "How Vacuum Power Brakes Perform", but it's just chuck full of interesting brake parts secrets and timely tips on reducing the cost of operating your fleet. Actual photographs of each part in the vacuum cylinder. Diagrams and cross section views revealing what happens from the time the brake pedal is depressed 'till the brake shoes bring your truck to a quick, smooth stop.

In addition you'll find a handy Comparative Number Listing. An Interchangeability Chart showing names and numbers of almost every part of every known manufacture. And last but not least you'll want to refer to the parts listing and description—of every part—more often than any other section in the manual.

But don't delay getting your copy of this practical Vacuum Brake manual. It's Free! Send for it today!

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2332 Logan Blvd.
Chicago

Rush to me your New Vacuum & Air Power Brake Parts Manual. I'm interested in learning how to reduce the operating expense of our fleet.

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My Name:.....
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State:.....

Vacuum and Air Power Brake Parts Manual

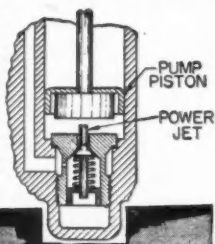
SHOWCASE

OF NEW PRODUCTS FOR FLEETS
(Presented on This and Succeeding Pages)

HOW the New HOOF Fuel Economizers SAVE GAS

on governed Fords and Chevrolets by capitalizing on the definite relation which exists between engine load and manifold vacuum . . . high vacuum means light load; low vacuum, heavy load or greater h. p. output.

THIS DIAGRAM shows why the Hoof Fuel Economizer SAVES FUEL on governed Fords with Stromberg Carburetors. It keeps the power jet closed except when engine load requires extra fuel.



For FORDS
THE NEW HOOF
FUEL ECONOMI-
ZER ASSEMBLY

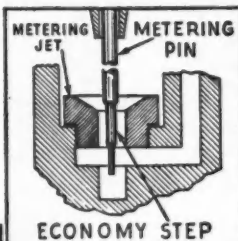
List
\$2.25

Unless the engine load requires the extra fuel provided by the power jet, the manifold vacuum compresses the Hoof Fuel Economizer, which keeps the carburetor jet closed. With the standard pump rod (mechanical control), the power jet is open constantly on full accelerator pedal—without regard to engine load.

Try One for 30 days . . . Money Back if you fail to get these guaranteed savings.

SEE YOUR SERVICEMAN OR WRITE HOOF TODAY

THIS DIAGRAM shows how the Hoof Vacuum Metering Control SAVES FUEL on governed Chevrolets with Carter Carburetors. The greater the metering pin size, in the metering jet, the less gas is used.



For CHEVROLETS
THE NEW HOOF
VACUUM
METERING
CONTROL

List
\$3.25

With high manifold vacuum, the piston in the Hoof Vacuum Metering Control holds the metering pin on the economy step—permitting the "power step" to come into operation only when heavy engine load (low vacuum) demands extra fuel. On any governed Chevrolet, without this economy vacuum control, the metering pin remains on the "power step", with full accelerator pedal, regardless of engine load.

Order Your Test Unit Today on Hoof's Money Back Guarantee!

See for yourself why operators like Watson Trucking Co. report savings of 9 to 10 gallons a day in 200 miles! Hoof Fuel Economizers are guaranteed to deliver gas savings of 5% to 15% if you install them on any governor-equipped Chevrolet (Carter carburetor) or Ford V-8 (Stromberg carburetor). Gas savings of 15% to 25% are guaranteed when both Hoof Governors and Fuel Economizers are installed on ungoverned Fords and Chevrolets.

Makers of the famous Hoof Cantilever Governors

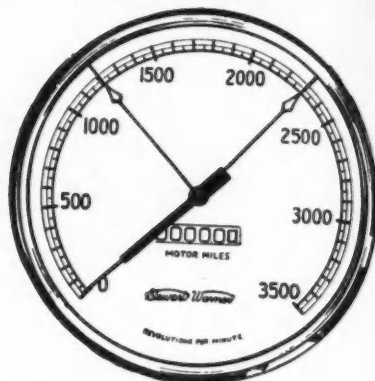
HOOF PRODUCTS

4543 South Laramie Avenue, Dept. BEC,
CHICAGO, ILLINOIS

Motor Mile Tachometer

The Motor Mile Recording Tachometer, incorporating the Stewart-Warner magnetic movement, is actually as simple in operation and reading as the ordinary speedometer. Essentially an instrument for indicating engine revolutions per minute, it includes an odometer which registers the accumulated engine revolutions in terms of motor miles.

The "Economy Range" within which the engine operates at maximum torque, maximum horsepower and road-speed efficiency consistent with fuel economy, is indicated by two stationary markers, adjustable to



individual engines, on the dial face of the instrument. Actual r.p.m. is constantly shown on the dial by a pointer-needle. When the needle is within the economy range the motor is operating at maximum efficiency.

The odometer, indicating engine motor miles as contrasted to truck road miles, is claimed to be invaluable in determining engine wear, and as a definite indicator for maintenance schedules. A booklet describing this instrument in detail is available on request from the Stewart-Warner Corp., 1846 Diversey Parkway, Chicago, Ill.

Goodyear's New YKL SS

A new truck tire combining the long-wearing qualities of Rayotwist in the carcass and a tread said to be 50 per cent thicker than ordinary standards is announced by Goodyear Tire & Rubber Co., Akron, Ohio. Known as the YKL SS the tire is



made in four sizes for trucks, tractors and trailers of 2½ tons and over. The two extra mileage features are combined by a new principle of multiple compounding that gives greater adhesion between tread and carcass. Wide riding ribs assist in assuring slow even wear. Write the manufacturer for full details.

New Do-Ray Clearance Lamp

A new lamp that can be used as a clearance or marker lamp—is announced by Do-Ray Lamp Co., 1458 S. Michigan Ave., Chicago. It has flat mounting 3½ in. (TURN TO PAGE 124, PLEASE)

STUDEBAKER



DIAMOND MATCH CO.



PUGET SOUND POWER AND LIGHT CO.



BEKINS MOVING & STORAGE CO.



SOUTHERN CALIFORNIA EDISON CO.

Serving and Saving in West Coast Fleets!

Studebaker popularity on the Pacific seaboard matches the nationwide preferment which these great trucks are winning.



Studebaker Trucks range up to 20,000 pounds gross rating (32,000 pounds gross train rating).



They are built in both Cab-Forward and Standard Series Models.



They are operated in quantity by the world's foremost fleet owners.



They are sold and competently serviced throughout America and foreign countries.



Consult your Studebaker dealer!

THE STUDEBAKER CORPORATION
TRUCK DIVISION
SOUTH BEND, INDIANA

NEW PRODUCTS

(CONTINUED FROM PAGE 122)

diameter over-all. Depth with lens is $2\frac{1}{4}$ in. Udyllite finish, rust proof bezel to hold lens in place. Gives maximum light from 3 cp., 6-8 volt bulb. Concealed bolts attach the lamp to any flat surface. When mounted 3 in line, six inches apart, this model makes an ideal identification lamp. Full details from the manufacturer.

Rocker Arm Attachment

A new rocker arm grinding attachment for use with the B & D super-service valve refacer has been developed by the Black

& Decker Mfg. Co. The device, which consists of a micrometer feed mounted on a carefully machined bar fitting in the wheel spindle housing, operates on the outer end of the refacer wheel spindle and does not interfere with the refacing set-up. A bracket holds a diamond point for dressing the wheel, and an adjustable arm which is pivoted and slotted to permit the grinding of various size rocker arms. A double-cone clamp holds the rocker arm and is adjusted for bore of the rocker arm to be ground.

The attachment is also adaptable to some of the older models. Full details from Black & Decker Mfg. Co., Towson, Md.

New AC Heavy-Duty Filter

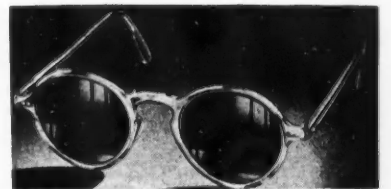
Model S-3, a new high-efficiency, clarifying-type oil filter for large trucks is announced by AC Spark Plug division of General Motors, Flint, Mich. Similar to the S-1 for small trucks and the L-1 for passenger cars, the filter features an igneonite removable element.



AC is also producing a full line of igneonite replacement elements for servicing practically all makes of clarifying type filters, and a new line of "X"-type filters with the same element to replace sealed container types. Address AC for full details.

New Polaroid Day Glasses

A new anti-glare driving glass, using polaroid Lenses to eliminate road glare, and retailing at \$1.95, is being offered by Polaroid Corp., 285 Columbus Avenue, Boston, Mass. The polaroid lenses contain billions of light-controlling crystals and are of the same material developed for use in eliminating headlight glare, pro-



ducing three-dimensional movies and glareless lighting. The new glasses are designed only for use against daytime glare—not against headlights. Sunglasses of previous types darken everything, the things which you want to see just as much as the glare which you don't, while Polaroid Day Glasses are said to automatically choose between the useful light and the useless reflected glare.

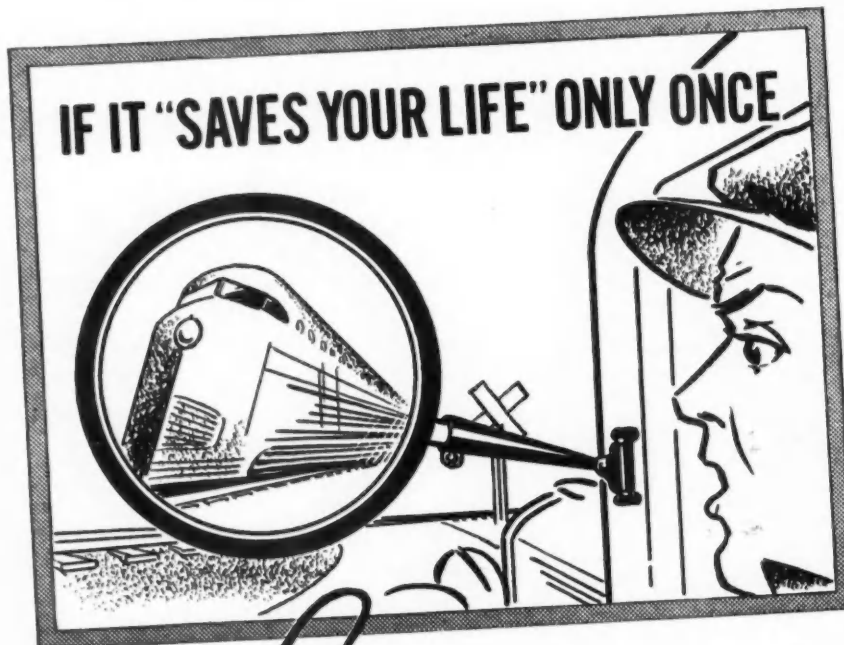
Compensating Fifth Wheel

The Austin Trailer Equipment Co., Muskegon, Mich. is now offering a compensating fifth wheel which permits much closer coupling with a square nose trailer. According to the manufacturer the use of this coupling provides up to 18 sq. ft. of increased loading space without increased length making possible shorter overall length without reduction in payload. Traction and maneuverability are improved and jackknifing is said to be prevented. A full mechanical description will appear in the May issue.

New Hansen Tacker

A new one-hand tacking machine is announced by the A. L. Hansen Mfg. Co., 5045 Ravenswood Ave., Chicago, Ill. The device, known as T-2 Hansco, operates by compression the same as other Kling-Tite and Hansco Tackers, but is essentially dif-

(TURN TO PAGE 126, PLEASE)



—It's Worth it

No. 1319 Do-Ray Universal Truck Mirror
—List \$2.00

Use this Do-Ray Nobby—the protected device that resists hard usage.
No. 1292—List \$1.00



No. 1132—This Do-Ray Three-Way Life is designed to meet present day driving requirements—List \$1.25.

But this Universal Truck Mirror will give you SAFETY SERVICE many times a day for years.

It is a sturdy, truly universal job. Extra attachment is furnished so installation can be made on hinge or any other convenient place on the cab. Adjustment unlimited—up, down, backward, forward. One of many dependable products in the Do-Ray line. Ask your jobber or write

Do-Ray Lamp Company

1458 S. Michigan Ave., Chicago, Ill.



DO-RAY
CERTIFIED
SAFETY LIGHTING AND REFLECTING DEVICES

Improved Insulation saves truck operating dollars...

Bound-Batt
protects all
perishable products

Dry-Zero Bound-Batt reduces refrigerant consumption for entire life of truck

Refrigerant consumption is kept at a minimum, thereby saving operating expense, when the new Dry-Zero Bound-Batt insulation is installed in your truck body. Furthermore, this new Dry-Zero product is so low in cost that every truck owner can afford to put it in every truck he operates.

Dollars Saved. This new form of Dry-Zero is manufactured by an exclusive process which eliminates costly manufacturing steps formerly required. The new process results in: 1) insulation of the same high quality as other Dry-Zero products, 2) but at lower cost.

Dry-Zero reduces refrigeration costs because it is such an efficient insulant. Its rating of 0.24 Btu has been established by independent authorities such as the U. S. Bureau of Standards.

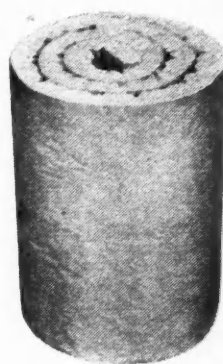
When Bound-Batt insulation is used, less refrigerant

is required to maintain a specific temperature per 24 hour periods. This economy benefits the truck owner for the entire life of the truck, because Dry-Zero does not deteriorate.

You Benefit. No matter what kind of perishable product you are hauling, Dry-Zero gives adequate protection. Thousands of operators have proved this.

Get this benefit yourself. You can specify Bound-Batt for all types and sizes of truck bodies (and other refrigerating units, such as coolers). It can be purchased in rolls suitable for cutting to size on the job, or fabricated to specifications.

Write for your free copy of the Truck Insulation Bulletin. If you have a special insulation problem, send full details to the Engineering Department.



MEAT



FRUIT



ICE CREAM



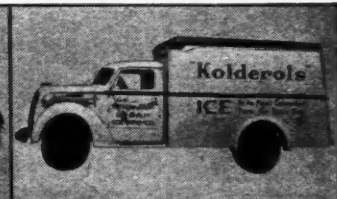
MILK



PRODUCE



FISH



ICE

The most efficient
commercial insulant known

DRY-ZERO
MADE IN U.S.A.
**Bound-Batt
Insulation**

Dry-Zero Corporation
Chicago—222 North Bank Drive
New York—60 East 42nd Street

NEW PRODUCTS

(CONTINUED FROM PAGE 124)

ferent and new in design. It is much thinner, drives a much narrower tackpoint only $\frac{1}{8}$ inch at crown, and uses a greater variety of tackpoints. These features make it adaptable to a wider range of uses, doing not only tacking jobs commonly performed by other model tackers, but many jobs not possible except with a machine of this design. It drives, with one machine, tackpoints from $\frac{3}{16}$ inch to $\frac{1}{2}$ inch lengths.

New AC Spark Plug Cleaner

An improved and larger spark plug cleaner that cleans a spark plug in faster time than previous models, and which uses less cleaning compound, has been introduced by the AC Spark Plug division of General Motors, Flint, Mich.

The new cleaner cleans and dusts off a spark plug in one operation without removing it from the cleaner. This is accomplished by a dual valve mechanism. Valves are operated by pushing down on a cone-shaped dust guard. The guard is pressed all the way down for cleaning and released halfway back for dusting. Adapters automatically locate themselves in the

correct position for best cleaning results according to the size of the spark plug. Known as Model "C," the cleaner is 12 in. x 24 in. A special cleaner stand is available at slight extra cost.

K-D Extension Mirror

Answering insistent demands for a quality mirror which would hold up over a long period of years, The K-D Lamp Co. offers Model No. 108 Extension Mirror. Special features include mirror position locking screws, heavy-duty swivel socket ring, heavy duty lock collar for extension arm which cannot slip, reinforced tubing at bracket, adjustable bracket for hinges, double set screws for panel mounting and a double-heat-treated bolt. The $\frac{5}{8}$ -in. EVALAST Mirror is finished in black enamel and is hermetically sealed with metallic copper. Extension is from 15 in. to 24 in. Further details may be obtained from The K-D Lamp Co., 610 W. Court St., Cincinnati, O.

B-K Brake for 1939 Trucks

A new B-K power brake for 1939 Ford and Chevrolet trucks features a reaction-ary vacuum suspended cylinder of the internal valve type which eliminates necessity of external valve and lines. Advantages of the new unit as explained by Bendix are: (1) maintenance of "pedal feel" so that driver knows just how much brake he is applying; (2) mechanism protected from foreign elements; (3) leaves mechanical braking system intact provid-



The combination service offered by GATKE lifts a weight from fleet managers' shoulders and reduces maintenance costs.

A GATKE Survey Form makes it easy to furnish data and get the recommendations of GATKE Engineers for each unit you operate

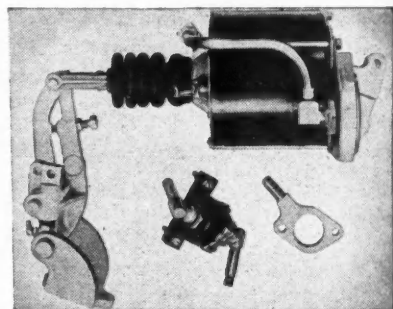
Whether you operate a fleet of trucks or passenger cars — in mountainous country or heavy traffic — whatever your requirements—there's a GATKE Genuine CUSTOM-BILT SET that's thoroughly proved on the same type of equipment operating under similar conditions!

Ask your GATKE Jobber or write us for the GATKE Plan that simplifies scientific selection of Brake Lining



BRAKE LINERS & BLOCKS

GATKE CORPORATION 228 N. La Salle St., CHICAGO, ILL.



ing utmost safety; (4) can be used with trailer brakes by adding necessary accessories obtainable in packaged kits. The new unit complies with all state laws including the 15-minute break-away clause for trailer brakes. Full details from Bendix Products division of Bendix Aviation Corp., 401 Bendix Drive, South Bend, Ind.

Nu-Met Metal Reviver

A new chemical developed for use on all bright trim is said to clean, polish and preserve the finish. It is offered by the Nu-Met Chemical Corp., 1452 Broadway, New York, is available in pint and gallon sizes and carries a broad guarantee of satisfaction. Full details from the makers.

Ace R.P.M. Governor

The Scientific Research, Inc., Williamsport, Pa., is introducing a governor which consists of a centrifugal switch and a magnetic switch in the fuel line. The centrifugal switch in the fuel line. The centrifugal switch in the fuel line. (TURN TO PAGE 128, PLEASE)

A New AC KLEER-KLEEN OIL FILTER

**FOR 7-QUART CRANKCASES
AND LARGER**



AC

announces a new Klee-Kleen Oil Filter for big-capacity crankcases. It's the new Model S-3

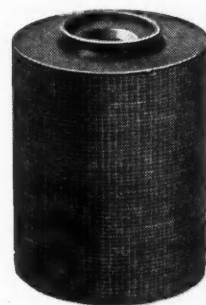
With the Model S-1 for crankcase capacities up to 6 quarts, the new S-3—for crankcase capacities of seven quarts or more — now makes it possible to give all engines, all sizes, the money-saving protection which AC Klee-Kleen design assures.

Here's what the AC KLEER-KLEEN FILTER DOES:

- | | |
|--|---|
| 1 Removes all dirt, dust, sludge, water and discoloration from oil. | 4 Keeps oil lines and piston rings free, and thus preserves engine power and fuel economy. |
| 2 Cuts oil consumption per thousand miles. | 5 Prolongs engine life indefinitely. |
| 3 Cleans and reconditions old oil. | |

Replace Element only when oil becomes so dark that marks on gauge stick cannot be seen easily

Many kinds and grades of oil are in use today. You will be sure of best results if you check oil periodically and follow the recommendation of the engine builder as to when oil should be changed.



**NEW—Fuel Oil Filtering
Element for factory-
equipped Diesel engines
(Element T-11 fits Klee-
Kleen Filter T-1)**

(Genuine AC Igneonite replacement element)

Save Oil — Save Engine Wear — Save Money AC KLEER-KLEEN OIL FILTER

AC SPARK PLUG DIVISION • General Motors Corporation • FLINT, MICHIGAN

COMMERCIAL CAR JOURNAL
APRIL, 1939

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NEW PRODUCTS

(CONTINUED FROM PAGE 126)

fugal switch is adjusted for speed and attached to the dust cap end of the generator. When the generator speed reaches the governed point the switch restricts the flow of fuel into the carburetor and at the same time lights a light on the instrument board. Write to the manufacturer for full particulars.

Permite Aluminum Paint

Permite ready-mixed aluminum paint will henceforth be offered in two distinct

types, one for maintenance work, the other for product finishing, according to an announcement by the Paint Division of Aluminum Industries, Inc., Cincinnati, Ohio.

The maintenance group includes a high heat-resisting type with an exclusive synthetic alkyd resinous vehicle, which permits its use on iron and steel where temperatures range from 450°F. up to 1000°F.; an "outdoor," long oil type for exterior applications; a wet surface type; a quick drying type; a medium oil length type for machinery and equipment, and a utility grade for interior appearance and illumination.

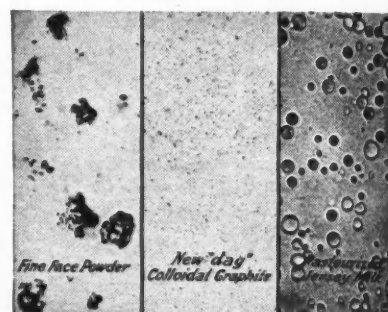
The product finishing classification includes a quick drying, ready-mixed alumi-

num paint that will dry to touch in 10 to 15 min. for application on ornaments and all kinds of wood and metal products; a ready-mixed nitrocellulose spraying lacquer that will dry to touch in 5 to 10 minutes; a very fast drying spraying lacquer which will dry to touch in ½ to 2 min., and dry hard in 3 to 5 min.; a short-oil synthetic grade intended for use where a very smooth and brilliant finish is desired, and a dipping type which can be air dried or baked at 300°F.

Both groups of Permite Aluminum Paint are ready-mixed and ready to use. For further details, address the manufacturer.

Super-fine Graphite

Enlarged 1693 times by the microscope, the photograph shows a comparison between fine face powder, the new "Dag" brand colloidal graphite and Jersey milk. The graphite form is specially recommended for such tough lubricating jobs as headlamp bulbs and rims, battery terminals, squeaky fan belts, distributor



cams, sticky carburetor controls, bendix gears, door locks, etc., etc. The graphite may be suspended in such volatile liquids as carbon tetrachloride or kerosene. When the liquid evaporates, a thin film of lubricant is deposited on the surface. Complete details from Acheson Colloids Corp., Port Huron, Mich.

Klemm Chemistone Filter

The Klemm Automotive Products Co., 1718 N. Damen Ave., Chicago, Ill. has a new oil filter which uses Chemistone, a new synthetic stone for filtering. After cleaning the oil passes through several inches of Translucite which restores the oil color. The filter cap can be removed for replacing the cartridge and sealed by fingertight locking. Moisture and dirt can be removed from gravity chamber at any time. For full details write to the manufacturer.



Aro Oil Heater Flushing

With the new Aro flushing oil heater, fleetmen can handle gear flushing jobs with maximum speed and efficiency. A
(TURN TO PAGE 130, PLEASE)

COMMERCIAL CAR JOURNAL
APRIL, 1939

NEW HIGH IN JACK VALUES

FAMOUS
SERIES 900 FEATURES
"Ryth-Matic" Valve Action for smoother lifting.
Pendulum Balance speeds positioning.
High Carbon "Gun Barrel" Steel Cylinder for strength, power, and safety.
"Micro-Accurate" Safety Release Control for positive lowering.
"Snug-Fit" Power Pump for long life, trouble-free action.



No. 930
5½ TON HYDRAULIC
\$895
now 8

905 — 1½ Tons—now \$ 2.80
912 — 2 Tons—now \$ 3.70
925 — 3½ Tons—now \$ 6.95
935 — 8 Tons—now \$11.75
945 — 12 Tons—now \$19.50
950 — 20 Tons—now \$32.50

Dealer net prices — Slightly higher west of Rockies and in Canada.

• Look over those great Jack buys. Every one a member of the famous Walker Series 900 . . . and every one sets a new standard of jack value in its capacity class. • Engineered by the world's largest jack maker. Known, wherever trucks run, for super-strong construction, extra margins of safety, smooth, trouble-free operation. • See them at Jack Headquarters—your Walker Jobber.

WALKER MANUFACTURING CO., RACINE, WISCONSIN
Also makers of Walker Electric Lifts and Exhaust Silencers

WALKER HYDRAULIC JACKS

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A Top Speed Finish-

NEPTO★NAMEL SOLID COLORS

★ First Choice for ★
Commercial Vehicles

IT'S TOP-SPEED from start to finish when racing outboard motor boats are "wide open" and riding lanes of spray right to the checkered flag.

And it's top-speed from start to finish when Nepto-Namel *Solid Colors* get commercial vehicles and passenger cars refinished and out of the shop *in a hurry*. Nepto-Namel Solid Colors cut labor and material costs. Their exceptionally high solid content gives them a greater build and hiding power. They spray easily to a smooth, uniform film of great depth and opacity.

Nepto-Namel Solid Colors dry dust-free in a few minutes for high-speed handling. Their smooth, superb-gloss finish needs no rubbing or polishing. And their low cost plus their beauty and rugged durability, makes them first choice of finishing shops and fleet owners.

Ask your jobber for details about Lowe Brothers advanced line of automotive finishes. They will save you time and money. If you do not know the name of the nearest jobber, write direct to The Lowe Brothers Company, Dayton, Ohio.

Lowe Brothers

AUTOMOTIVE FINISHES

A COMPLETE HIGH-SPEED LINE FOR
EVERY PURPOSE



MATCHED PRODUCTION COLORS
MIXING LACQUERS
SYNTHETIC ENAMELS
UNDERCOATS AND THINNERS

NEW PRODUCTS

(CONTINUED FROM PAGE 128)

capacity of 6½ qt. assures ample supply and a unique feature is that while oil is being heated to a fixed temperature by thermostatic control, an additional supply is being pre-heated by radiation. Full details of heater and the new Aro two-way flusher may be had from Aro Equipment Corp., Bryan, Ohio.

Bonney Tension Wrench

Bonney Forge & Tool Works, Allentown, Pa., has developed a torque-indicating

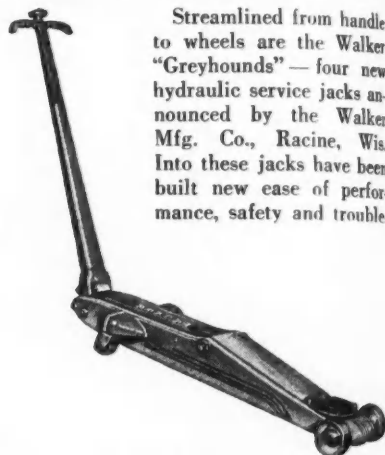
wrench priced within the reach of every mechanic. Known as No. 56, it is constructed with a spring steel shaft and a pointer which remains rigid. A scale, calibrated from 0 to 200 ft. lb., is placed on the shaft near the handle. The extremely small head with which it is equipped permits using it in places normally inaccessible with torque wrenches. Weighs 3 lb. and has an over all length of 23 in. Full information from the manufacturer.

Rex Carbide Emergency Light

The Rex Emergency Light, a carbide-burning flare-type light said to be fool-proof and inherently safe has been intro-

duced by Hunter Mfg. Corp., Bristol, Pa. A simple valve mechanism controls gas formation and assures a continuous 250 to 350 c.p. light for at least 2½ hours. It can be stored for long periods without deterioration. To operate, it is only necessary to remove the seal, place the light in water and light burner. Full details may be secured from the manufacturer.

Walker "Greyhound" Jacks



Streamlined from handle to wheels are the Walker "Greyhounds"—four new hydraulic service jacks announced by the Walker Mfg. Co., Racine, Wis. Into these jacks have been built new ease of performance, safety and trouble-

proof operation. Ranging in capacity from 2 to 4 ton, the four jacks cover all the needs of the fleet owner.

Features include straight-line drive, a simple and efficient method of hydraulic jack power application; radial-thrust casters—mounting on full radial-thrust bearings to give greater handling ease; and silent-speed pump, made possible by a new by-pass valve. Full details from the manufacturer.

Portable Lubricator

Offering a completely portable lubrication unit independent of air line or power line, the new Pressure-Lube Scooter should find a welcome in many fleet operations. The pump which can develop pressures up to 12,000 lb. per sq. in., is operated by a 19-plate battery in conjunction with a regular truck starting motor and fly-wheel. The battery will supply current for 24 hours of continuous operation and a built-in bulb-type charger is furnished so

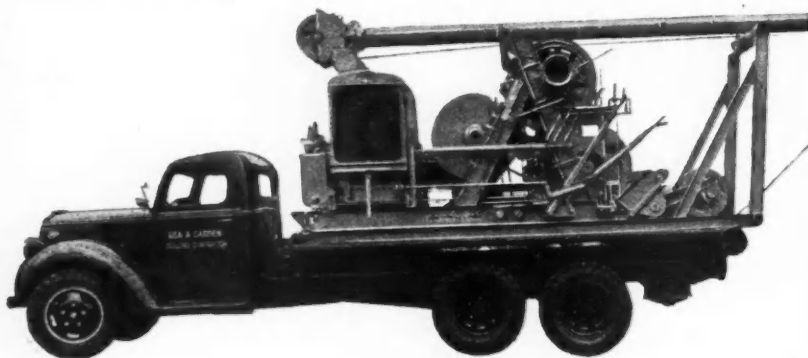


that the battery may be charged without removal. The switch is magnetic and the control box is a combination hydraulic (TURN TO PAGE 140, PLEASE)

Equipment

"Must be right"

Warford TRUCKS



THE principles upon which Warford Trucks are built have proven sound and superior through the unrivaled performance records of many hundreds of those trucks in all classes of heavy hauling.

The Warford Dual Axle Drive is established and recognized as the simplest, most efficient, and most flexible ever developed for heavy-duty truck operation.

MORE TONS • MORE MILES • LESS COST

THE WARFORD CORPORATION
44 WHITEHALL STREET, NEW YORK, N. Y.

HERE'S THE ANSWER

To Many of Your Tractor-Trailer Problems

"AUSTIN" NOW OFFERS A Compensating Fifth Wheel Embodying Many New and Exclusive Features and Operating Advantages.



Illustration shows streamlining attained by use of Austin Compensating Fifth Wheel.

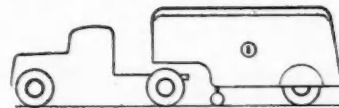
Permits closer coupling with square-nosed trailer body—Shorter overall length of equipment without reduction in payload, and up to 18 square feet additional loading space without increased length—Provides equal load distribution, therefore greater tractionability and maneuverability—Reduces wind resistance to a minimum—Greater speed around curves with increased ease and safety—Prevents jack-knifing and minimizes skidding hazards—Smarter trailer design and full streamlining attainable only with the Austin Patented Compensating Fifth Wheel.

Coupled with Compensating Fifth Wheel.



Exclusive Patent Rights in U.S.A. and
Foreign Countries
(except Canada)

Coupled with Conventional Fifth Wheel.



Send for circulars.

AUSTIN TRAILER EQUIPMENT COMPANY

MUSKEGON

MICHIGAN

COMMERCIAL CAR JOURNAL
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'SEE WITH 'EM FIRST' K-D MIRRORS

MODEL NO. 108 EXTENSION MIRROR



**Equipped with
Evalast
Mirrors**

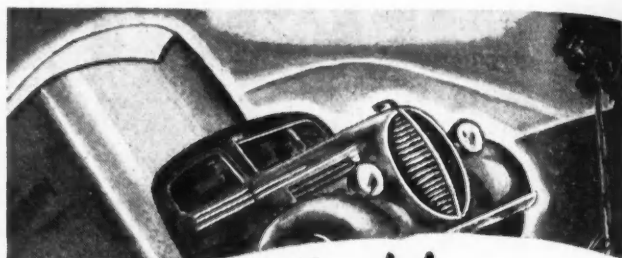
Permanently brilliant;
silver plated surface;
hermetically sealed;
will not cloud, streak,
or discolor.

Members by invitation . . . Rice Leaders of the World Association

The **K-D Lamp Co.**
CINCINNATI, O.

Note the features:

1. Mirror position locking screws.
2. Heavy duty swivel socket ring.
3. 5 1/2" enclosed mirror.
4. Heavy duty lock collar for extension arm, cannot slip.
5. Reinforced tubing at bracket.
6. Adjustable bracket for hinges.
7. Double set screws for panel mounting.
8. Extension from 15" to 24"
9. Double heat treated bolt.
10. Black enamel finish.



*"What—Hills like
This in HIGH?"*



FREE
complete facts
on the McCulloch
Supercharger for Ford
V-8 trucks and Ford V-8
and Mercury cars. Write today.

"And how! . . . With the McCulloch Supercharger on my Ford V-8 truck, hills are a cinch," say truck operators everywhere. "You don't shift gears half as much." Increased torque—that's the secret of McCulloch amazing performance. You step up your engine from 85 to 124 horsepower, increase gas mileage from 7.3 to 19.7¢—all without materially increasing weight. Give your Ford V-8 truck the benefits of this modern engineering development for faster schedules, greater loads, easier operation at lower cost.

MCCULLOCH ENGINEERING COMPANY
3223 1/2 NORTH 31ST STREET • MILWAUKEE, WISCONSIN

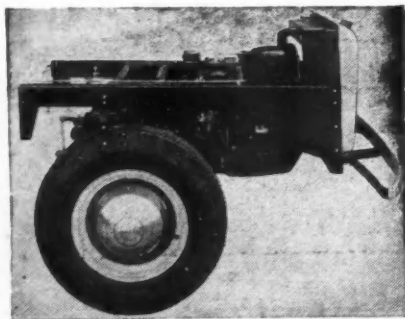
Diamond T Takes Over Pak-Age-Car Sales and Service

Effective March 10 the Diamond T Motor Car Co. took over the entire sales and service of the Pak-Age-Car house-to-house delivery truck.

The redesigned and improved Pak-Age-Car will continue to be manufactured in the Connersville, Ind. plant of the Pak-Age-Car Corp., but it will be sold by the Diamond T dealer organization.

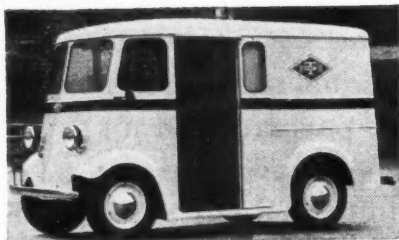
The new 1939 Diamond T Pak-Age-Car is presented in two models of identical mechanical specifications but with a difference in wheelbase and body size. The Model 91 provides 145 cu. ft. of load capacity on a wheelbase of 90 in. It is particularly suitable for retail milk delivery with a normal capacity of 25-35 cases.

The larger Model 117 has a 116-in. wheelbase and a load capacity of 212 cu. ft.



Power unit at rear is removable intact

It is generally preferred for bakers, dry-cleaners, laundries and parcel delivery, and is also suitable for larger milk routes where 40-45 cases are handled.



New Diamond T Pak-Age-Car Delivery Unit

Texas Railroads Ask I.C.C. To Reconsider Truck Permits

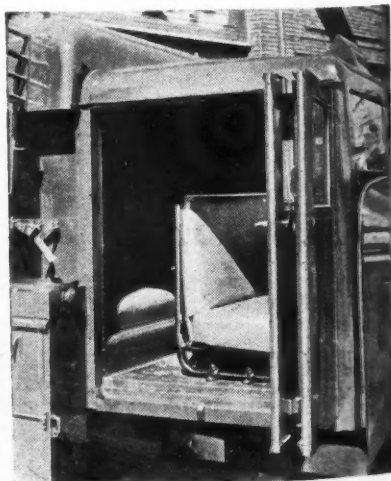
Principal railroads operating in Texas and some of their trucking affiliates or subsidiaries have filed petitions with the Interstate Commerce Commission in efforts to capitalize the recent U. S. Supreme Court decision in the case of McDonald vs. Thompson.

In that case the Supreme Court held that an interstate trucker operating in Texas prior to the "grandfather date" of June 1, 1935, without authority from the Texas Commission, was not engaged in "bona fide" operation under terms of the Federal Motor Carrier Act.

The petitioning carriers are asking the I.C.C. to revoke rights it granted to such carriers, or at least to reconsider its action in granting them.

Utility Body Has 7-Man Cab

A new line construction body featuring a seven-man cab has been announced by the American Coach & Body Co., 9503 Woodland Ave., Cleveland, Ohio. A special feature is the bus-type folding door which furnishes easy access to either seat and provides ventilation through an adjustable opening between panels. The rear seat of the crew compartment is recessed into the body. A "caboscope" permits operator to view the derrick in raised position. Aside from new features the body is similar to the company's DPL design and fits a chassis with CA dimension of 84 in. and gross vehicle rating of not less than 12,000 lb. Full details from the makers.

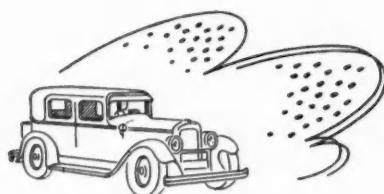


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Where else could you get
**TAPERED ROLLER BEARING
 REPLACEMENTS FOR EVERY
 ORPHAN CAR ON THE ROADS?**



It is reliably estimated that there are many, many thousands of orphan cars, trucks, trailers and buses currently operating on the highways of the United States. The Timken Roller Bearing Company through its 16 factory-controlled branch warehouses and a nation-wide chain of Authorized Distributors can supply tapered roller bearing equipment for any and all of these vehicles. Where else could you get this service?

TIMKEN
TAPERED ROLLER BEARINGS

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO
Service-sales Division

NEW PRODUCTS

(CONTINUED FROM PAGE 130)

and electric mechanism. The hand gun control is constructed on the principle of a check valve and contains no washers or gaskets. Furnished in one or two container models. Write to Pressurelube, Inc., 22 East 40th St., New York, for full details.

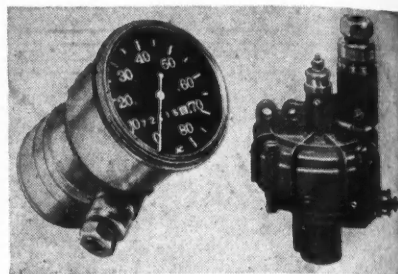
"Rust-Ban," New Esso Product

A new line of rust and corrosion inhibitors designed for use in protecting exposed metal surfaces against virtually

all weather conditions has been perfected by the Standard Oil Co., of New Jersey and is available through Esso Marketers under the trade name "Rust-Ban". In addition to suitable petroleum ingredients the new product contains a special compound which offsets the electro-chemical conditions causing rust.

Electric Speedometer Drive

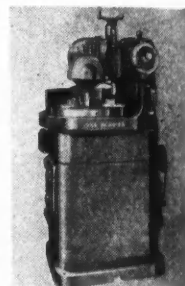
A new electric speedometer and tachometer remote control drive designed to overcome difficulties with mechanically driven instruments where long flexible shafts are used, has been made available for all types of vehicles by the AC Spark



Plug division of General Motors. The device consists of a drive unit which is attached to the transmission take-off by a short flexible cable, and a motor unit mounted on the back of a standard mechanical speedometer. A four-wire electrical connection is supplied at each end and a standard 12-volt battery supplies the power. Write AC at Flint, Mich., for full details.

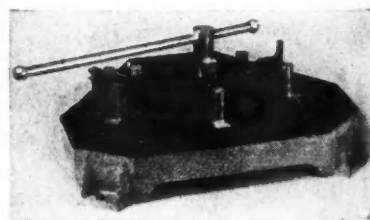
Pressure Plate Grinder

Practically all clutch troubles include uneven wear or scoring of the pressure plate, but Van Norman's new No. 444 surface grinder now makes immediate regrinding possible. The new machine has a 1 hp. motor on the wheel head, and a ½ hp. motor to rotate the chuck. There are two speeds and two feeds. Work is held by means of special raising blocks. To prevent lateral motion of the pressure plate while grinding, a 3-jaw, precision chuck has been made standard equipment. Full details may be had from the Van Norman Machine Tool Co., Springfield, Mass.



Kam-Way Brake Shoe Fitter

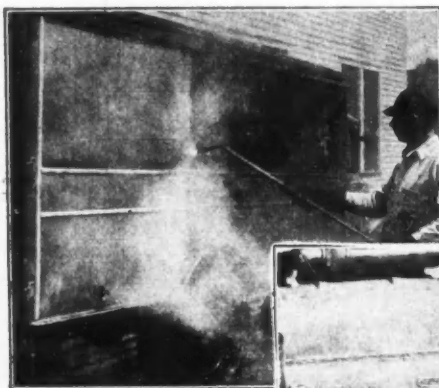
With an ingenious new Grey-Rock Kam-Way Shoe Fitter brake shoes can be brought back to their original arc insuring that shoes will accurately fit supports and the entire length of the lining contact the drum. By correcting the shoe, toe and heel contact, chatter, squeal and dive, are eliminated without the need for grinding. With this new device a set of eight



shoes can be fitted to their own drums in less than 15 minutes. Leading Grey-Rock distributors are using the machine in their shoe relining departments and are offering it for sale. For your nearest Grey-Rock jobber write U. S. Asbestos Division, Manheim, Penna.

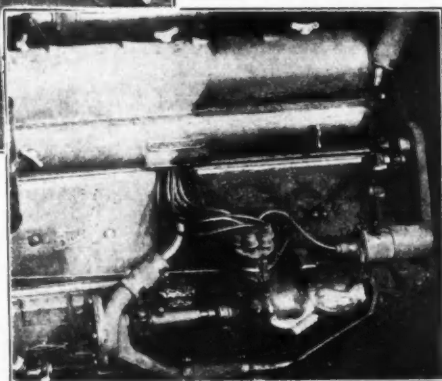
(TURN TO PAGE 181, PLEASE)

COMMERCIAL CAR JOURNAL
APRIL, 1939



JENNY strips oil base paint from cars and trucks 12 times faster than by hand—and does a better job.

JENNY cleans engine blocks in 10 to 15 minutes. No expensive, hazardous gasoline, kerosene or waste required.



FLEET MAINTENANCE

COSTS
DROP

with

HYPRESSURE JENNY on the job!



THE ORIGINAL STEAM CLEANER

Fleet owners report startling savings when Hypressure JENNY steam-cleaning replaces old, slow, hand-cleaning methods. Now, cleaning of chassis, engine blocks, running gears, parts, etc., takes only minutes instead of hours. Hypressure JENNY'S more thorough cleaning permits closer inspection; helps keep your trucks on the road, and saves 25% to 40% of the mechanics' time on repair jobs. And clean equipment looks, runs and is better. Find out how much Hypressure JENNY can save for your fleet. Get your free survey by mailing the coupon—no obligations.

HOMESTEAD VALVE MFG. COMPANY
P. O. Box 90 Coraopolis, Pa.

Go ahead—tell us how and how much JENNY can save us.

We have men employed in maintenance.

We repair trucks monthly.

We repaint trucks monthly.

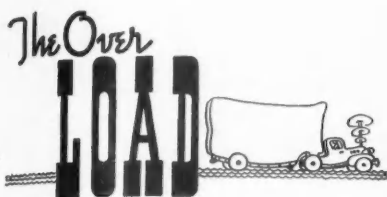
We clean sq. ft. garage floor monthly.

We want to clean

Name

Address

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Thanks for the Amity

The job of getting out this special issue—The 1939 Fleet Operators' Reference Annual—would not be complete until we paid our respects and expressed our gratefulness to the hundreds of men at factories, state and national capitals and home offices who, as usual, cooperated with us unstintingly. So we pay our respects and say our thank-you right now to all the men who by their helpfulness made this issue possible. We hope they share our feelings that by this means they are contributing to more efficient operation of vehicles and to the progress of truck transportation.

It's New and Up-to-Date

Practically everything in this issue is new in its up-to-dateness. Some of the material is newer than that. There is, for instance, an entirely original section devoted to the maintenance of electrical equipment used on trucks. Our comprehensive compilation, to the best of our knowledge, is the first ever published. It covers Batteries, Generators, Charging Controls, Starters and Distributors.

Tip Us Off; We Tip You

And again we solicit fleet operators to send us their suggestions for improving the Reference Annual. We want to make it as helpful as possible to them. In this connection we urge operators to hold on to their old copies of the Reference Annual. They may contain data dealing with old models which had to be eliminated from this issue to make room for the new models. However, wherever it has been practicable to do so in this issue, operators will find data dealing with models going back as much as five years.

A Word About Regular Features

A special issue such as this quite naturally makes it impossible to publish certain features to which readers have become accustomed. If your favorite feature is not listed in the Editorial Contents on page 3, we hope you will be patient with us for 30 days; all regular features will be resumed in the May issue. That is true especially of the Shop Hints for Fleet Shops, of which, by the way, we have quite a slew on hand, but for which we will always be ready to pay \$5 per hint accepted; and of the Body-of-the-Month, which in May will feature a bread body design, and in June an ultra-ultra laundry design. Our correspondence with fleet operators on this body feature is very pleasing and a definite indication that it's a "natural."

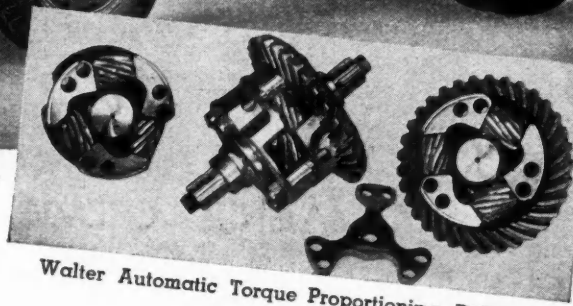
(TURN TO NEXT PAGE, PLEASE)

COMMERCIAL CAR JOURNAL
APRIL, 1939

Scientifically Correct Differentials —An Exclusive Walter Feature



Walter Diesel Model ADBS.



Walter Automatic Torque Proportioning Differential.

IN ordinary "four-wheel drive" trucks, the differential divides the torque equally between the drive wheels. That is why a wheel spinning on a slippery surface wastes the power while its mate lies dead.

This cannot happen with WALTER SNOW FIGHTERS and TRACTOR TRUCKS. The Walter Automatic Lock Torque Proportioning Differentials proportion the torque to the wheels in relation to their traction — those with least traction get the least and those with most traction get the most torque. That's what we mean by "Walter 100% Traction".

Three differentials of a simple worm and worm gear combination are used—one for the front wheels, one for the rear wheels and a center differential which proportions the torque between front and rear wheels. A center differential is necessary because front tires may have a different rolling radius from the rear tires.

Walter Automatic Torque Proportioning Differentials are successful because the basic principle is correct and because in the Walter it is properly applied. Walter Differentials are made greatly oversize for the torque loads they may carry. This is not possible with the ordinary type of truck axles. In fact, the Walter is designed throughout to a quality standard in keeping with the high efficiency of its unique differential.

Send for literature

WALTER MOTOR TRUCK CO.
1001-19 IRVING AVENUE, RIDGEWOOD, QUEENS, L. I., N. Y.

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Of Course You Can Get CLEAN FLOORS!



The 48-page Magnus Automotive Cleaning Handbook. Full of practical cleaning ideas and methods you can use. Ask for your copy.

FREE!

Get them clean and keep them clean, too. Sure—it's supposed to be a tough problem for a garage. But, this business of cleaning cement floors can be done surely—quickly and economically with

MAGNUS CEMENT CLEANER

With it you can remove all grease and oil deposits. And it also *hardens, whitens and dust-proofs* concrete. No other method will give you the results that MAGNUS CEMENT CLEANER does—nor at such a low cost.

Ask to have a Magnus Service Man call to show how easy it is to use and what a thorough job it does.

MAGNUS CHEMICAL COMPANY

Manufacturers of Cleaning Materials, Industrial Soaps, Metallic Soaps, Sulfonated Oils, Emulsifying Agents and Metal Working Lubricants.

38 South Avenue

Garwood, N. J.



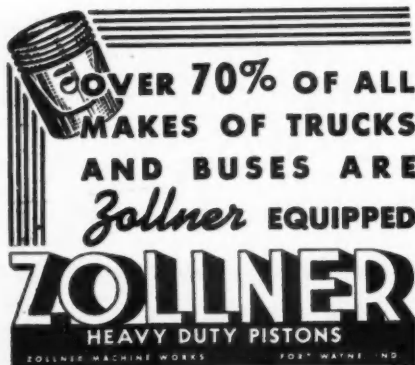
MAGNUS CLEANERS

Avoid Vapor Lock

An electric fuel pump, installed close to fuel tank, it pushes fuel to engine, avoiding vapor lock. Thoroughly reliable. Applicable to any gasoline-driven vehicle. Will not flood.

KING-SEELEY CORPORATION
ANN ARBOR, MICH.

KS FUEL PUMP



OVERLOAD

(CONTINUED FROM PAGE 175)

Calling All Contestants

In this issue we really ought to indulge ourselves in a final trumpeting of the \$450.00 Prize Contest, but we are forced to content ourselves with this brief notice that the contest ends May 15. Which means that from the moment they read this prospective contestants have a little more than 30 days in which to get their articles in under the wire. For details of the contest we refer interested readers to the March and February issues. If you are itching to see the New York or San Francisco Fairs or just itching to get hold of the grand prize of \$200 in cash, you better refer to those issues now and get busy.

Germany "Solves" Truck Rating

Moving into the international scene, it may interest readers to know that Germany, which seems to be resolving political issues high-handedly, has solved the problem of truck ratings in characteristic totalitarian fashion. To begin with, the motor vehicle industry was made a present of a "Generalbevollmächtiger." The American equivalent of that title is "czar." The holder of it is an army man, Col. von Schell. It might have been "schnell" because with dictatorial rapidity he accom-

plished a standardization of types with the "close cooperation of interested firms."

Only 4 Tonnages Allowed

As a result of this "close cooperation," beginning Jan. 1, 1940 the existing 15 load ratings for motor trucks will be liquidated as was Czecho-Slovakia and registering authorities will recognize only four, shall we call them, protectorates? The only ratings that will be recognized for registration will be 1½, 3, 4½ and 6½ tons. The so-called commercial vehicle will be allowed only in one type.

And Only 14 Chassis Types

All this we have culled from the writings of the Colonel's adjutant in a German contemporary—plus the fact that this standardization will result in the elimination of 99 of the 113 truck chassis types heretofore produced. Subtraction leaves 14 chassis types in four tonnage ratings.

How Different Over Here

We cannot help remarking how this differs from current thinking here. In the United States both those who use the trucks and those who sell them agree that maximum economy can be attained only by fitting the truck to the job, and that means an indefinite number of fits because of the variety of jobs to be performed. If our thinking is correct then Germany's move, forced as it undoubtedly has been by the need for industrial economy, will force business to use uneconomical vehicles.

Available Trucks

Builders of fine Motor Trucks, Tractors, Trailers and Buses since 1910.

Capacities from 1½ to 10 tons.

Write for bulletin

AVAILABLE TRUCK COMPANY

2501 Elston Ave. Chicago, Illinois

THUMB SCREW
ADJUSTMENT
BALANCED
(2-SIDE) PULL

OVER
LAPPING
SEAL

ONE
SIZE FOR
MEN

ADJUSTABLE
FOR SIZE

TRADE MARK

NOC-OUT

HOSE
CLAMPS

THE HOSE CLAMP WITH
THE THUMB SCREW

Seals absolutely against
leakage of antifreeze,
radiator connections, or
heater hose. Type A Ad-
justable, the Clamp with
the thumb screw, 1 size
fits many. Type GHH for
heater hose. Type GBB
for Booster Brakes.

WITTEK MFG. CO.
4305 W. 24th Pl. Chicago, U.S.A.

Classified Advertisements

FOR SALE:—Four 1933 Indiana Dump Trucks equipped with Cummins Diesel Motors—sixteen yard Wood aluminum bodies and hoists. Good mechanical condition. Inquire Cilco Terminal Co., Inc., 75 Third Street, Bridgeport, Conn.

COMMERCIAL CAR JOURNAL
APRIL, 1939

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NEWS

Truck Production Ahead of '38

Truck production in the United States and Canada during February totaled 61,244 units. This was 19 per cent above the February, 1938, figure of 51,464 units and 2 per cent below February's 62,502. Total for the first two months of the year was 123,746 compared with 109,726 during the same period a year ago, an increase of 13 per cent.

For January new truck registrations by make, see page 94.

Tire Mileage Contract Decision

A three-year contract between a rubber company and a bus company to supply tires on a mileage payment basis is a retail sale, according to a recent circuit court decision, and is therefore taxable by the state. The court said the chronic nature of necessary repairs removes this contract from that class of contracts within the scope of interstate commerce, even though the original sale was made in another state.

Car-Over-Cab Vehicles Safe

The Interstate Commerce Commission ruled on March 11 that "car-over-cab" vehicles for transporting automobiles is not unsafe, contrary to laws already adopted by Pennsylvania and West Virginia and considered by other states.

Kellogg-American Brake Merger

A merger of the Kellogg Compressor & Mfg Co. of Rochester, N. Y. and the American Brake Shoe & Foundry Co. has been effected. The new unit will be known as the Kellogg Division of the American Brake Shoe & Foundry Co. and headquarters will remain in Rochester.

In addition to continuing the Kellogg line of air compressors and equipment, the division has been granted an exclusive license to manufacture and market a pneumatic lift of unusual design, details of which are not yet released.

Huff Heads Truck Show Committee

J. F. Winchester, president of the National Motor Truck Show, Inc., has announced the appointment of Leo Huff as chairman of the Public Relations Committee for the Sixth Annual National Motor Truck Show to be conducted on Navy Pier, Chicago, Nov. 8 to 16, inclusive. Mr. Huff is associated with The Pure Oil Co. as manager of the Motor Transport Division and is also chairman of the Automotive Transport Committee of the American Petroleum Institute.

Wheeler Railroad Bill Introduced

A bill dealing with the reorganization of railroads in financial difficulties was introduced.

(TURN TO PAGE 178, PLEASE)

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APRIL, 1939

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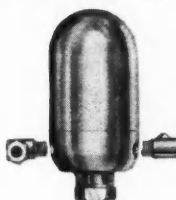
THE ACE SPEED GOVERNOR

Type No. 1 For All Types of Motor Vehicles
REVOLUTIONARY IN PERFORMANCE

Accurate as the Speedometer itself,
Co-ordinating Driver and Vehicle, and
Eliminating the Human Element

WORKS WITH THE SPEEDOMETER—
NOT THE ENGINE

The Ace Governor, Type No. 1, embodies the vital factor in safety that fleet owners have long awaited. Set at a predetermined speed with the speedometer, this Stewart Product permits any greater speed for a distance of from 600 to 800 ft. After this point, which is ample for safely passing another vehicle, the speed returns to that at which the governor was set.



The electro-magnetic valve located in the gas line between the carburetor and the gas supply quickly cuts off and restores the gas supply at the predetermined speed.



The warning light which is attached to the instrument panel.

ALLOWS ANY SPEED FOR PASSING
FOR 600 TO 800 FEET

Entirely controlled by the speedometer, and not by changing gears or r.p.m., the Ace Governor gives the operator all the power of the engine for use in emergencies. Thus handicaps of hill climbing, icy or slippery roads, hard pulls under heavy loads, etc., are overcome. A warning light on the instrument panel signals the functioning of the governor.



YOU CAN'T BEAT ACES

A Ace is the only governor having a factor of safety for passing. Provides gas for passing for 600 to 800 ft. after electro-magnetic valve cuts in.

A Ace permits full power in every gear up to predetermined speed. Enables driver to meet all emergencies—yet saves time and driver fatigue.

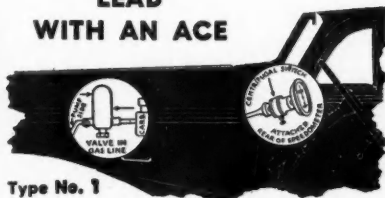
A Ace is the only governor which warns before it acts. A red dash board light flashes several seconds before the gas supply is checked.

20 minutes average installation time. Does not require expert attention. Can be serviced at any speedometer station or garage.

A Ace Governor, symbol of speed control and safety, pays for itself many times over by reducing operating and maintenance costs 20% to 50%.

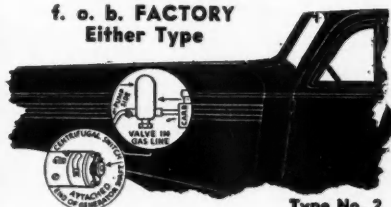
WITH THE DEUCE WILD

PLAY SAFE
LEAD
WITH AN ACE



Type No. 1

PRICE \$9.75
f. o. b. FACTORY
Either Type



Type No. 2

Showing Valve and Switch in Position

NOTE: Owners and Operators of Heavy Duty Vehicles

If you require R.P.M. control, The Ace Governor, Type No. 2, is generator-operated and synchronized with the motor R.P.M. at the speed required in high gear. Performance in low gears in similar ratio. Identical with Type No. 1 except that centrifugal switch fits dust cap end of generator shaft. IMPOSSIBLE FOR RECKLESS DRIVERS TO EXCESSIVELY RACE THE MOTOR. Both types standardized for most all trucks. No extra parts required. Simple instructions for installation. Call your dealer or speedometer service station, or communicate with our nearest office.

Scientific Research Incorporated

TRUST BLDG.,

WILLIAMSPORT, PA.

Genl. Distributors for Pa., N. Y., N. J., Del. and Md.

Manufactured and Distributed Internationally By

F. W. STEWART MFG. CO., Chicago, Ill.





BOLSER

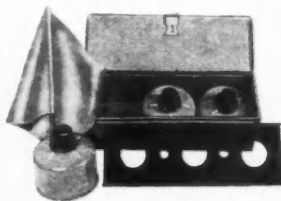
★ STANDARD EQUIPMENT
WHERE QUALITY RULES!

★ CHOOSE GENUINE
BOLSER FLARES!

Accepted nationally as the leader in truck flares. Patented "nesting" features make the Bolser easy to set out—easy to pick up. Leak-proof, wear-proof, rattle-proof.



CHECK-IN-BOX
FLARES!



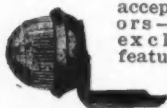
Three Flares in heavy metal box. Genuine Bolser flare locking device prevents leakage. Available with or without flags.

Bolser Flares Pass All State Requirements!

★ CHOOSE BOLSER
LIGHTS AND REFLECTORS



A complete line of approved equipment that is built to give dependable service under hardest usage. All styles—all types of mountings—accepted colors—many exclusive features.



★ CHOOSE BOLSER
FUL-VUE MIRRORS!



Here is the Mirror of the year—the Mirror floats in rubber, withstanding even a severe blow without breakage. Offset head mounting gives greater angle of vision. All metal parts processed to prevent rust.

★ CHOOSE BOLSER
DIRECTION SIGNALS!



An APPROVED direction signal for trucks, busses, autos, house trailers. Furnished in single face—flange single face—double face. Each type designed to mount at four different angles. Switch control for or without relay equipment.

Ask your jobber for Bolser equipment—
it's a "top value" line with full
APPROVAL!

THE BOLSER CORPORATION
Cedar Falls, Iowa

NEWS

(CONTINUED FROM PAGE 177)

duced in the Senate March 20 by Senators Wheeler and Truman, both members of the Senate Interstate Commerce Committee. Rumors to the contrary notwithstanding, the bill proposes no drastic shake-up in the Interstate Commerce Commission nor does it have any direct effect on further regulation of the trucking industry.

To Head Fruehauf Public Relations

Leslie C. Allman has been made vice-president and director of public relations of the Fruehauf Trailer Co., according to Harvey C. Fruehauf, president. It is felt that the appointment will witness a further extension of the public-spirited and courageous efforts of this organization in behalf of highway transportation. The Fruehauf company has financed the efforts of nationally known economists and engineers to secure the truth regarding the proper bases for legislation and taxation of motor vehicles. Mr. Allman's activities will include his participation in this work.

S.A.E. World Congress

The long-heralded World Automotive Engineering Congress of the Society of Automotive Engineers which will include visits to the New York World's Fair, the 500-mile Indianapolis Sweepstakes, Detroit automotive plants, and the Golden Gate Exposition with technical sessions in all but one of the cities, opens at the Hotel Pennsylvania, New York, May 22.

Sessions will continue in New York through May 26. May 29 and 30 will be spent at Indianapolis, May 31 to June 2 in Detroit, and June 6 to 8 in San Francisco.

Among papers to be presented at the Transportation and Maintenance Sessions in New York will be heard: "Comparative Utilization of Gasoline, Hesselman and Diesel Engines" by J. E. De Long, Waukesha Motor Co.; "Fleet Use of Small Passenger Cars and Half-Ton Trucks" by H. O. Mathews, Public Utility Engineering & Service Corp.; "A Million Miles of Road Test Service" by William Harrigan, Texas Co.; "Engineering Problems Involved in the Use of Ferrous Materials to Reduce Weight" by Col E. J. W. Ragsdale, Edw. G. Budd Mfg. Co.; "Engineering Problems in the Use of Non-Ferrous Materials to Reduce Weight" by Frank Jardine, Aluminum Co. of America.

In San Francisco fleetmen will hear papers on "Selection and Reception of Vehicles for Utility Service" by a prominent engineer; "Engineering Maintenance" by R. E. Rowley, Los Angeles Dept. of Water & Power; "Truck Factors in Upbuilding of Industry and Commerce" by Norman G. Shidle of the S.A.E. and "Bearings—From Design to Maintenance" by A. B. Willi, Federal Mogul Corp.

Balough Sees Bright Diesel Future

Based upon developments of the past year, the outlook for the modern high-

WONDERWELD

Seals
Engine Cracks
Permanently

WHEN THIS HAPPENS



Copyright 1938, Miller Mfg. Co.

Seal engine cracks permanently. Use Wonder-Weld. It gives a metallic seal that holds. That's the real difference in Wonder-Weld. This scientific formula combines three liquids and five solids. Repairs water leaks due to inside cylinder cracks—cracked valve ports, water jackets and aluminum or iron heads—in 30 minutes, not 30 hours. Sold by jobbers everywhere. Folder FREE! Miller Mfg. Co., 1220 Kaighn Ave., Camden, N. J.

For running-in new and rebuilt engines use auxiliary lubricants containing "dag"* Brand colloidal graphite.

Acheson Colloids Corporation

Port Huron  Michigan

*REG. U. S. PAT. OFF.

AUTOPULSE

ELECTRIC FUEL PUMP

- Uninterrupted Schedules
- Instant Starting
- Greater Economy
- No Vapor Lock
- Added Protection

AUTOPULSE CORP., DETROIT



COMMERCIAL CAR JOURNAL
APRIL, 1939

speed diesel engine will continue to broaden, according to Charles Balough, president of Hercules Motors Corp.

"Several truck manufacturers," said Mr. Balough, "announced diesel engines of their own manufacture during the last year. It may be some time before the results of this increased pressure by these newcomers into the diesel field is felt. Still, it is an excellent indication of the increasing demands for the modern diesel in truck operations. Last year we added the Model DOOC four-cylinder, 226.2 cu. in. diesel to our line. Its use by the Ford Motor Co. in chassis for the export market is directly affecting the demand for and the use of this smaller diesel for replacement use in the Ford and other small trucks.

"Manufacturers of diesel engines are continuously working towards lighter weight, higher speeds and lower costs, and every year shows distinct forward steps in developing diesel engines where they will more closely parallel gasoline engine features."

Trucks Help Reduce Rail Rates

The effect of increased motor truck competition in lowering railroad freight rates

Titeflex

FLEXIBLE FUEL LINES

for TRUCK, TRACTORS and BUSES

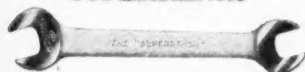
All-Metal—Flexible No Rubber

Send for 1939 Data Sheets

Titeflex Metal Hose Co.
NEWARK, N. J.

WILLIAMS

"SUPERRENCH"



Chrome-Molybdenum, heat-treated, chrome-finished. Styles and sizes for all work. Fully Guaranteed.

J. H. WILLIAMS & CO.
262 Lafayette St. New York, N. Y.

COMMERCIAL CAR JOURNAL
APRIL, 1939



IS A COMPLETE UNIT

COLDJET uses ice and salt for refrigerant. A centrifugal pump circulates the resulting brine through the cooling coils. A pressure type fan circulates air over these coils, forcing it throughout the truck body. The fan shaft projects through the truck body wall and is driven by a small gasoline engine mounted on the outside of the body.

Coldjet converts your truck or trailer into a miniature cold storage plant.

DROMGOLD and GLENN

1419 McCormick Bldg. Chicago, Illinois

The Turn Signal for You

Is The Signal That—

**COSTS YOU LESS
IS APPROVED
IS SAFE, RELIABLE
OPERATES EASILY**

That's Teleoptic THE ORIGINAL TURN SIGNAL

WRITE FOR DETAILS

THE TELEOPTIC COMPANY
RACINE, WIS.

on some commodities is brought out in an analysis reported recently by the Bureau of Agricultural Economics. The compilation shows an increase of nearly 100 per cent in the relative share of the total inter-city freight traffic by motor trucks during the current decade, in contrast with a decline of over 14 per cent in rail share of the total business.

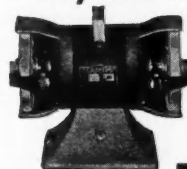
Mullady Sums Up Truck Position

What the motor transportation industry is; what it does; how it serves city, state and nation; how its problems are linked with the economic and social welfare of millions of Americans, were brought out by Walter Mullady, regional vice-president of the American Trucking Association, in

BALDOR

BALL BEARING GRINDERS

They WON'T BURN OUT



Ruggedly built. Ball-bearing Capacitor type motor protects against burn-out. Adjustable tool rests. Guaranteed 1 year **\$20.50**

BALDOR ELECTRIC CO.
4340 Dunean Avenue
ST. LOUIS, MO.

an address at a luncheon meeting sponsored jointly by the Cincinnati Chamber of Commerce Forum Committee and the Cincinnati Motor Transportation Club, at the Hotel Sinton, Cincinnati, March 14.

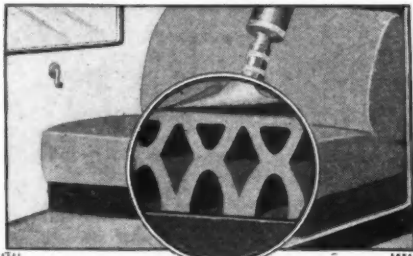
In his address, Mr. Mullady sounded a warning that legislation adversely affecting motor transport "is a direct threat to the jobs of more than 6,000,000 Americans directly and indirectly employed in this industry, and to the welfare of 18,000,000 others dependent upon them." He declared that it threatens the economic structure of an industry that uses more of the nation's main commodities than any other single industry.

Mr. Mullady directly charged the railroads with refusing to cooperate with other

(TURN TO NEXT PAGE, PLEASE)

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ON THEIR RECORD—USE Black Diamond All-Rubber SEAT CUSHIONS



Records from truckers everywhere who have equipped with these all-rubber semi-sponge seat cushions and back rests are positive proof that Black Diamonds offer the biggest value in seat cushion history. What makes this sensational performance possible is the use of the exclusive diamond grid construction along with other features never combined in any single cushion before. Longer life, no upkeep expense and greater comfort assured. Investigate before you invest if you want to reduce cushion costs to the lowest you have ever known.

KARPEX MANUFACTURING CO.
1426 E. 19th St., Indianapolis, Ind.

FRINK

SNO-PLOWS

REG. U.S. PAT. OFF.

**Both "V" TYPE and
ONE WAY BLADE TYPE**

hand or power hydraulic control

**FOR ALL MOTOR TRUCKS
FROM 1½ to 10 TONS**

Write for catalog 38AC and 38BC with discount to truck dealers.
CARL H. FRINK, Mfr., CLAYTON, 1000 1st., N. Y.
DAVENPORT-BESLER CORP., DAVENPORT, IOWA
FRINK SNO-PLOWS OF CAN. Ltd., TORONTO, ONT.

Be Sure to Specify



AMERICAN BOSCH
Fuel Injection Equipment

For Diesel Engines

AMERICAN BOSCH CORPORATION
Springfield, Mass. New York. Chicago. Detroit.

KINNEAR TRUCK DOORS

Also Doors for Buildings



ALL METAL . . .
Coils like a window shade, out of the way . . .
**CONVENIENT
BURGLAR PROOF
FIRE PROOF
MORE DURABLE**

Write for Details

KINNEAR
Manufacturing Company
2100-20 FIELDS AVE.
COLUMBUS, OHIO

(CONTINUED FROM PAGE 179)

transportation agencies in seeking a fair and equitable solution of the nation's transportation problems, and cited the alleged efforts of the railroads to destroy the Interstate Commerce Commission through advocacy of a different kind of commission. He also charged the railroads with seeking to obstruct the progress of the motor transportation industry.

APPOINTMENTS

Lewis H. Thomas has been named sales manager of the Tank Division of the Fruehauf Trailer Co. with headquarters in Detroit. Earl Wright now heads the Denver branch succeeding Mr. Thomas. D. E. Cowdery is new Grand Rapids branch manager, replacing H. L. Mudge who takes over the Cincinnati branch. F. E. Boylan is now regional manager in charge of Sault Ste Marie, Saginaw and Grand Rapids territories.

Frank Oberle, formerly a member of the diesel sales division of Hercules Motor Corp., Canton, Ohio, has joined the sales division of the American Bosch Corp., Springfield, Mass.



International Harvester Co. has announced the retirement of Edward A. Johnson (left) as vice-president in charge of engineering and patents. A. W. Scarratt (right) assistant to Mr. Johnson, fills the vacant post.

The Stewart-Warner Corp., Chicago, announces the promotion of John E. Crockett, from assistant to director of advertising sales promotion manager Stewart-Warner accessories.



Tom W. Moss whose appointment as director of Dodge Truck sales to succeed J. D. Burke, resigned, has been announced by Chrysler Corp.

N. E. Malone, former sales promotion manager of The Goodyear Tire and Rubber Co., has been appointed advertising manager of The Seiberling Rubber Co., Akron, Ohio.

Leo F. Hunderup has been elected a vice-president of the Van Norman Machine Tool Co., Springfield, Mass. Charles R. Crowder, Van Norman representative on the west coast, has been named as new sales manager of the automotive division.



**Money-Wise Fleet Operators
Use**

BEAURLINE FOUNTAIN BRUSHES (Patented)

Beaurline, the original fountain type car washing brush, is designed to save time, effort and space in busy fleet shops. That's why money-wise fleet operators everywhere are turning to Beaurline for the solution to their washing problems.

Write for complete information on several new models, shapes and sizes, and for new low prices.

BEAURLINE FOUNTAIN BRUSH CO.
1243 S. Wabash Avenue, Chicago

JONES PORTABLE TACHOMETER



The world's largest operators of commercial vehicles use Jones Portable Tachometers to check engine speeds for tune-ups, and setting governors, etc. Here are a few: Standard Oil Co., of La., N. J.; N. Y.; Shell Petroleum Co., Atlantic Refining Company, Tidewater Oil Company, Keeshin Motor Express, Mack Trucks, Brockway, U. S. Navy.

Direct, instantaneous reading
JONES-MOTROLA-STAMFORD, CONN.
432 FAIRFIELD AVENUE

IT PAYS TO BUY

EDWARDS

QUALITY

SEMI-TRAILERS

EDWARDS IRON WORKS, INC.
SOUTH BEND, INDIANA

OUTSTANDING

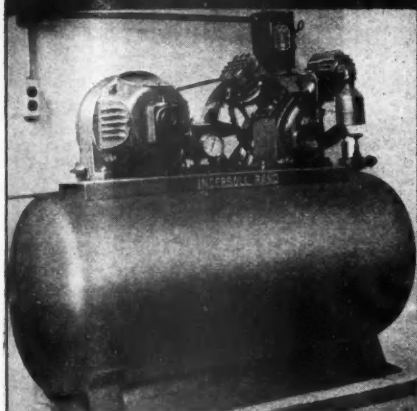
performance in the
Automotive Industry



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APRIL, 1939

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LOW POWER COSTS



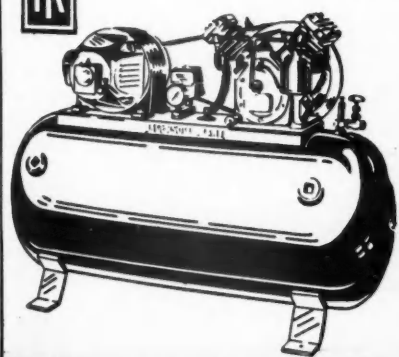
Ingersoll-Rand Type 30 compressors are remarkably efficient. This means that they operate a shorter time in supplying your air needs. This results in lower power bills—an important operating expense.

Other features such as ball bearings, stainless steel valves, and totally enclosed crankcase keep maintenance down.

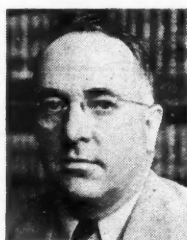
Ask the I-R jobber about them. There is a complete range of sizes, $\frac{1}{4}$ to 10 h.p.



750-3



Ingersoll-Rand
11 BROADWAY, NEW YORK, N. Y.
I-R JOBBERS EVERYWHERE



M. W. McConkey, who recently was named president of the Hydraulic Brake Co., a Bendix Aviation subsidiary. He has been associated with the company since its beginning in '25.

The Warner Electric Brake Mfg. Co., Beloit, Wis., announces the appointment of Paul Smith, formerly production manager, as general manager, to succeed William J. Dunn, resigned.

Private Carriers & Non-Drivers Not Exempt from Wage-Hour Law

The Wage and Hour Division of the Department of Labor has ruled that employees of private carriers and non-driving employees of common and contract carriers are not exempt from the hour provisions of the wage-hour law if engaged in interstate commerce. The ruling is subject to revision should the Interstate Commerce Commission decide that such employees are within its jurisdiction under the Motor Carrier Act. Hearings are now being held by the I.C.C. in regard to this question.

The Division also ruled that wage and hour provisions of the Fair Labor Standards Act apply to employees engaged either in interstate commerce or in the production of goods for interstate commerce.

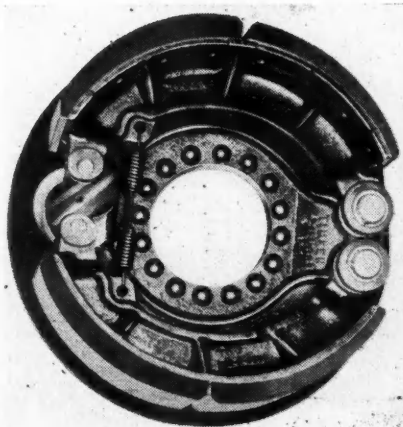
NEW PRODUCTS

(CONTINUED FROM PAGE 140)

New Trailmobile Brake

All Trailmobile trailers are now equipped with a new brake developed especially for trailer use. The brake shoes of this new brake are straddle mounted on the spider and are made of an alloy which provides sufficient strength combined with light weight.

The cam roller is hardened steel and is bushed. The brake cam is S shaped with a constant lift so that application rate is uniform regardless of lining thickness. The shoes are ribbed with fins for



rapid heat dissipation. Shoes are shaped to prevent uneven wear of the lining. There is no dead center on the cam where shoes can lock in the on position.

(TURN TO NEXT PAGE, PLEASE)

"ALEMITE POWER GUNS work plenty fast - and no foolin'!"



One Alemite Power Gun Services Fleet of Buses

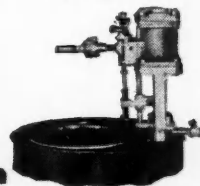
THERE are five pits like this in the garage of a prominent eastern traction company, where its fleet receives regular lubrication service from this Alemite "Rock Crusher" Power Gun. This gun is subjected to a strenuous schedule, but no more so than that of thousands of other Alemite Power Guns in the service of fleet owners everywhere.

Whether you operate a few trucks or a great fleet, you'll find that Alemite makes lubrication equipment exactly suited to your requirements—at a price suited to your budget. Cut operating costs, avoid breakdowns, keep your buses or trucks rolling by giving them thorough lubrication at frequent intervals with Alemite Lubrication Equipment!



Hand or Foot Operated
Model 6699-A

Heavy duty portable gun
holds 15 lbs. lubricant.
Develops 4000 to 8000
lbs. pressure.



Air-Operated Barrel Pump
Model 6700

Pumps from original
drum; operates on 75 to
175 lbs. of air; develops
up to 6000 lbs. pressure.

ALEMITE

REG. U.S. PAT. OFF.

A Division of Stewart-Warner Corporation

1876 Diversey Parkway, Chicago, Ill.

Stewart-Warner-Alemite Corporation
of Canada, Ltd., Belleville, Ontario

WORLD'S LARGEST MANUFACTURER OF
LUBRICATION PRODUCTS

LOOK WHAT THE "KING" 200 TESTER with EXHAUST GAS ANALYZER has to offer You



The "KING" MT-200
with
EXHAUST GAS
ANALYZER
\$240.00

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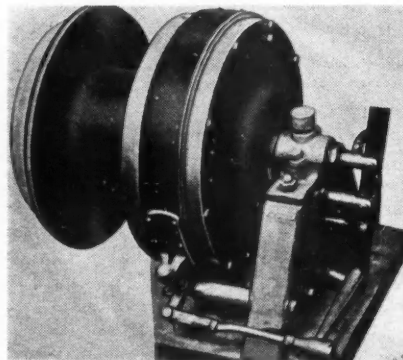
(CONTINUED FROM PAGE 181)

Both the cam shaft which turns in a needle bearing and the spider pins which support the shoe are hardened. The pins are protected from dirt by grease retainers.

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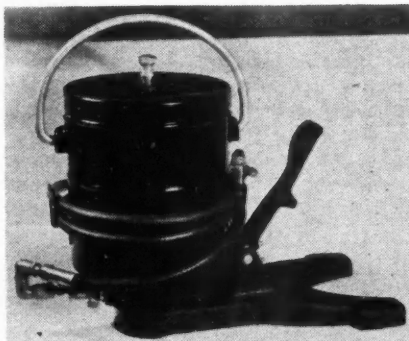
A new hydraulic clutch with many interesting features has been developed for use on winches, hoists, bull-dozer operations, etc. There are no clutch plates or lining the action being entirely by oil, yet said to be unaffected by temperature or viscosity changes. Will operate in ver-



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